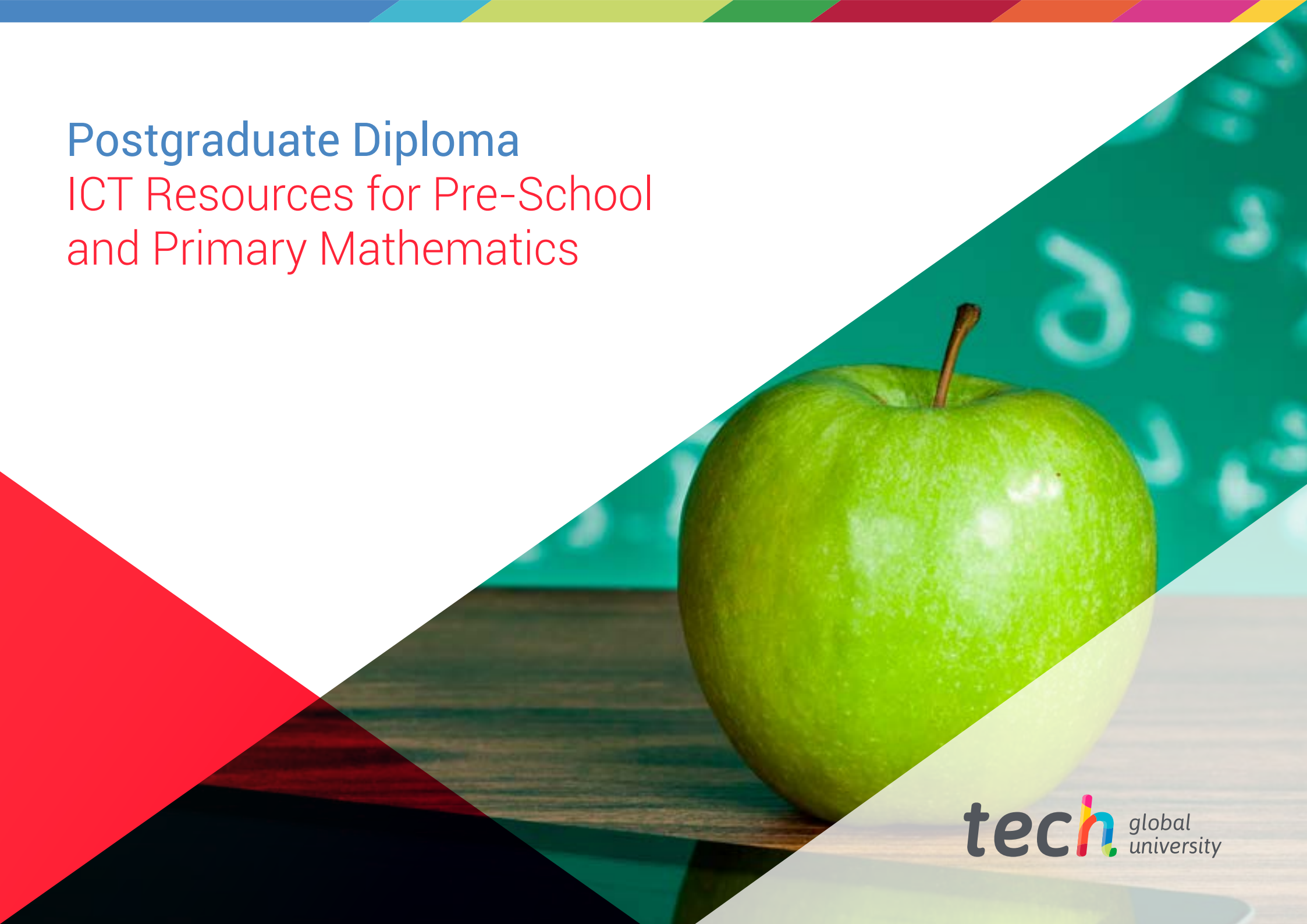
Postgraduate Diploma
ICT Resources for Pre-School and Primary Mathematics



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Postgraduate Diploma
ICT Resources for Pre-School and Primary Mathematics

- Modality: **online**
- Duration: **3 months**
- Certificate: **TECH Global University**
- Accreditation: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/education/postgraduate-diploma/postgraduate-diploma-ict-resources-pre-school-primary-mathematics

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01

Introduction

Thanks to the continuous technological advances that have been made in the digital field, as well as the incessant work of thousands of experts, it has been possible to establish educational guidelines that aid teachers to carry out effective and dynamic teaching in which children are involved through the use of applications, devices and games adapted to different ages. Therefore, children are involved through the use of applications, devices and games adapted to different ages. In order for teachers to learn about this type of methodologies, TECH offers this complete program through which they can delve into the design and development of innovative and state-of-the-art didactic materials. In addition, it will effectively implement the use of ICT in Pre-School and Primary classrooms.

Would you like to become your students' favorite teacher because of your innovative, playful and dynamic strategies? Opt, then, for this Postgraduate Diploma and find out how to achieve it"

The use of new technologies for teaching, in this case mathematics, has allowed thousands of professionals in the education sector to create dynamic, innovative and effective learning environments in which children have fun while acquiring the necessary knowledge to master areas such as arithmetic, geometry, algebra or graphing. Transversal and multimedia ICT resources have helped hundreds of thousands of students of all ages to regain interest in this science, breaking down the barriers that have made it one of the most hated subjects in the educational environment.

As a result, after a long and exhaustive period of research and in order to provide graduates with the most exhaustive and innovative information that will allow them to update their teaching practice in terms of didactic and pedagogical tools for the teaching of technology, TECH has developed a complete Postgraduate Diploma perfect for this purpose. This is an academic experience in which the teacher will be able to explore new ways of learning for Primary and Pre-School classrooms, with adaptations for students with special needs. They will also study the design and development of educational materials such as workshops and games, focussing on the use of ICT in today's academic environment.

All this over 450 hours of the best theoretical, practical and supplementary content, the latter presented in different formats: detailed videos, research articles, complementary readings, news, dynamic summaries, self-knowledge exercises and much more. This will allow them to make the most of an academic experience designed by and for education specialists, whose objective is to transmit knowledge to students that will elevate their work to the highest level, after only 6 months of 100% online specialization.

This **Postgraduate Diploma in ICT Resources for Pre-school and Primary Mathematics** contains the most complete and up-to-date educational program on the market. The most important features include:

- The examination of practical cases presented by experts in Mathematics teaching
- The graphic, schematic and practical contents of the book provide technical and practical information on those disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

The best program on today's academic market to explore the design and development of educational materials for the teaching of mathematics through play"

Its convenient 100% online format will allow you to access the contents of this PROGRAM from wherever you want and whenever you want, from any device with an Internet connection"

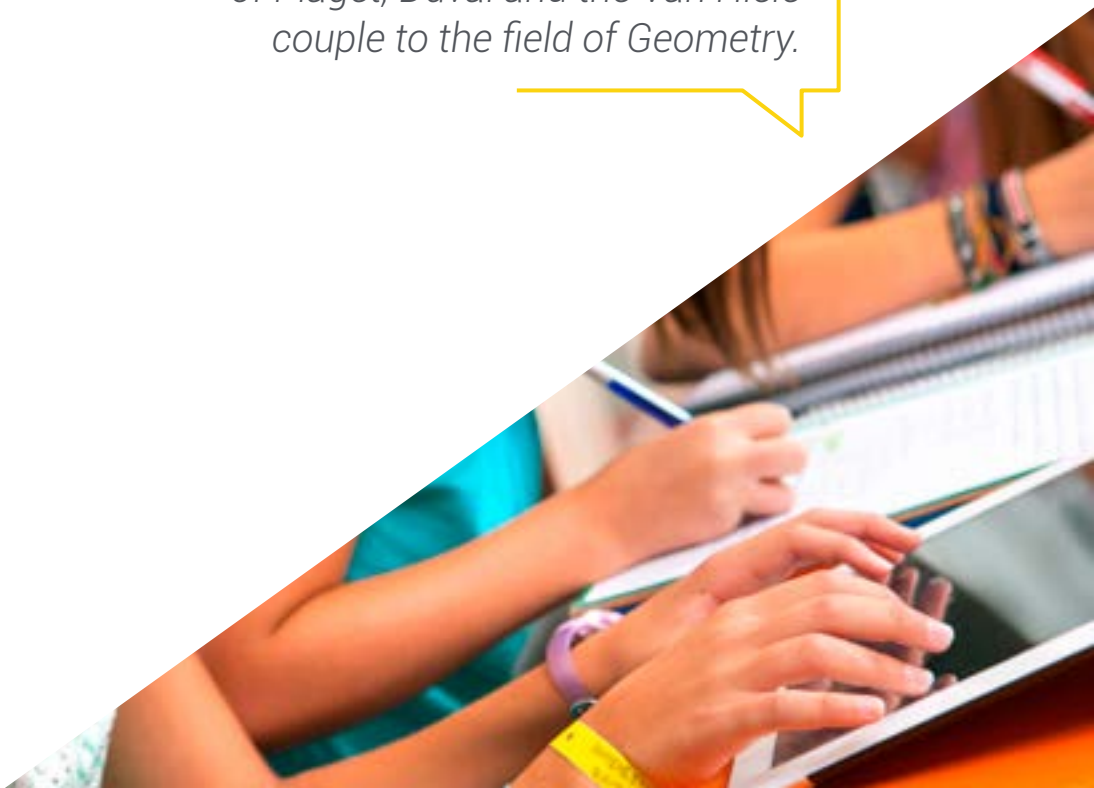
Would you like to explore the guidelines for the development of interactive materials for the classroom using ICT? With this program, you will build your expertise over 450 hours.

You will work dynamically to gain an understanding of the contributions of Piaget, Duval and the Van Hiele couple to the field of Geometry.

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

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

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



02

Objectives

The objective of this Postgraduate Diploma in ICT Resources for Early Childhood and Elementary Mathematics is none other than to provide students with the latest and most comprehensive information related to the use of digital tools for effective and innovative teaching. Through the 450 hours of diverse content included in this program, students will be able to perfect their teaching skills in order to contribute to the advancement of technological, dynamic and multidisciplinary learning.

If you would like to focus on holistic teaching through project-based learning, this program will show you how to do it more effectively"

General Objectives

- Create and implement practical workshops for the consolidation of mathematical concepts
- Understand geometry within the curricular framework of Pre-school and Elementary School Education
- Learn about the contributions of Piaget, Duval and the Van Hiele couple to the field of geometry
- Create and design interactive content and resources for later use in the classroom

A program at the forefront of Early Childhood and Elementary education for you to update your teaching methods and offer the most outstanding and innovative classes"

Specific Objectives

Module 1. Methodology and Classroom Based Learning in the Elementary School Classroom Students with Adaptations

- Be able to use evaluation criteria.
- Develop materials and resources to work on the problems in the classroom
- Become familiar with different methodologies such as Core Standards, EntusiasMat, Jump Math y ABN

Module 2. Design and Development of Didactic Materials: Mathematics Workshop/Mathematics Games

- Know the basic principles for the elaboration of resources and teaching materials
- Design materials adapted to the learning ofv measurement quantities
- Design materials adapted to the learning of probability and statistics
- Design materials adapted to the learning of geometry
- Relate the teaching of mathematics from other disciplines
- Create audiovisual resources for teaching mathematics
- Use comics as a didactic resource in the teaching of mathematics
- Create and implement practical workshops for the consolidation of mathematical concepts
- Understand geometry within the curricular framework of Pre-school and Elementary School Education
- Learn about the contributions of Piaget, Duval and the Van Hiele couple to the field of geometry

Module 3. ICT in Pre-school and Primary Education. Development of Interactive Materials for the Classroom Workshops

- Understand the importance of the use of ICT in the Pre-school and Elementary School Education classroom and the previous considerations to take into account
- Take into account the needs when implementing ICT in the classroom, both personal and material
- Become familiar with Bloom's Taxonomy, as well as its updating and digital application
- Create and design interactive content and resources for later use in the classroom

03

Course Management

Having a renowned faculty allows students, on the one hand, to take full advantage of this Postgraduate Diploma program and, on the other hand to benefit from a critical and alternative view of the profession and the current teaching environment For this reason, TECH has put together a teaching team made up of the best specialists in metacognitive learning for mathematics. This group of top-level professionals who will share the teaching techniques that have worked best for them in the modern academic environment.

The teaching team have selected real cases from their own classes, so that you can develop your own action plan for the different cases that may arise in the school environment"

Management

Ms. Delgado Pérez, María José

- TPR and Mathematics teacher at Peñalar College
- High School Teacher
- Expert in Educational Center Management
- Co-author of technology books with McGraw Hill Publishers.
- Master's Degree in Educational Center Management and Administration.
- Leadership and management in Elementary, Middle School and High School
- Graduate in teaching with a specialization in English.
- Industrial Engineer

Professors

D. López Pajarón, Juan

- High School Science Teacher at the Montesclaros School of the Educare Group.
- Coordinator and Responsible for Educational Projects in High School.
- Technician at Tragsa
- Biologist with experience in the field of environmental conservation.

Ms. Vega, Isabel

- Specialized Teachers in teaching mathematics and learning disabilities.
- Primary Education Teacher
- Primary School Education Cycle Coordinator.
- Specialization in Special Education and Didactics of Mathematics Graduate in Teacher Training

Ms. Hitos, María

- Pre-School and Primary School Teacher Specialised in Mathematics.
- Pre-school and Primary Education Teacher
- Coordinator of the English Department in Pre-School
- Habilitación Lingüística en Inglés por la Comunidad de Madrid (English Language Proficiency by the Community of Madrid)

Ms. Iglesias Serranilla, Elena

- Teacher of Pre-school and Primary School Education Cone specialization in Music.
- Elementary School Education First Cycle Coordinator.
- specialization in New Learning Methodologies.

Ms. Soriano de Antonio, Nuria

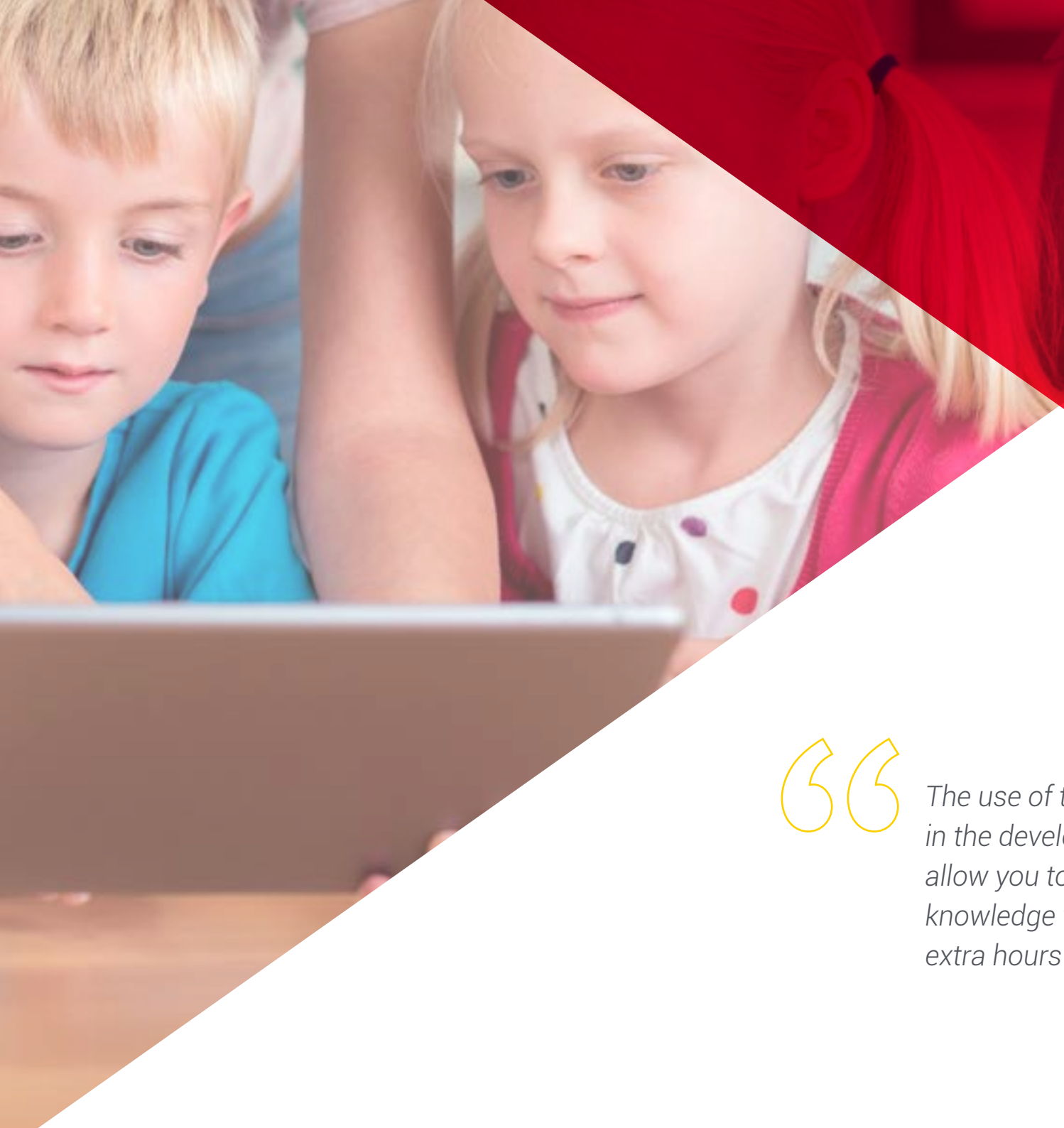
- Philologist Specialist in Spanish Language and Literature
- Master's Degree in High School Education and Vocational Training from the Alfonso X el Sabio University
- Master's Degree in Spanish for Foreigners
- Expert in Educational Center Management and Administration
- Expert in Didactics of Spanish
- Degree in Hispanic Philology from the Complutense University of Madrid

Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

04

Structure and Content

The syllabus of this program has been designed according to the professional criteria of the teaching team, as well as making use of the Relearning methodology for the development of the content. Thanks to this, it has been possible to create a Postgraduate Diploma at the forefront of the educational sector, in which students will find the most exhaustive and innovative information related to the use of ICT in the area of Mathematics at different levels. In addition to the theory, you will have dozens of hours of supplementary material so that you can explore each section in a way suited to you.



The use of the Relearning methodology in the development of this program will allow you to acquire a broad based of knowledge without the need to invest extra hours in memorization"

Module 1. Methodology and Classroom Based Learning in Primary School Classroom Students with Adaptations

1.1. Mathematics Curriculum in Elementary School Education
- 1.1.1. General Considerations of the Elementary School Education Curriculum in Spain
- 1.1.2. Mathematics Curriculum Objectives
- 1.1.3. Learning Standards
- 1.1.4. Basic Skills
- 1.1.5. Contribution of Mathematics to Skills Development
- 1.1.6. Assessment Criteria
- 1.1.7. Headings
- 1.1.8. Application of the Assessment

1.2. Didactic Methodology in Elementary School Education
- 1.2.1. Introduction to Didactic Methodology in Elementary School Education
- 1.2.2. Teaching Methodology for Elementary School Mathematics
- 1.2.3. Didactic Methodologies of the XXI Century: Education 3.0
- 1.2.4. Methodologies Which One to Choose?
- 1.2.5. State - Memorize - Understand vs. Understand - State - Memorize - Apply
- 1.2.6. Metalanguage and Object Language
- 1.2.7. Competencies of the Mathematics Teacher
- 1.2.8. Educational Practice

1.3. Assessment in the Mathematics Classroom
- 1.3.1. What is Assessment?
- 1.3.2. Assessment According to the Mathematics Curriculum
- 1.3.3. Learning Assessment
- 1.3.4. Assessment of the Acquisition of Key Concepts
- 1.3.5. Assessment of the Teaching Methodology
- 1.3.6. Mathematics Exam Design
- 1.3.7. Correction of Mathematics Exams
- 1.3.8. Headings
- 1.3.9. Student Self-Assessment

1.4. Errors, Difficulties and Blockages in the Teaching and Learning of Mathematics

1.4.1. Visual Memory
1.4.2. Understanding of Concepts about Magnitudes
1.4.3. Understanding Abstract Concepts
1.4.4. Reading and Interpreting Statements
1.4.5. Basic Operations
1.4.6. Multiplication Tables
1.4.7. Fractions
1.4.8. Problem Solving
1.4.9. Rushing

1.5. Materials and Resources for the Teaching and Learning of Mathematics
1.5.1. Introduction to Materials and Resources
1.5.2. Sense and Purpose of its Use for Learning Enhancement
1.5.3. Classification of Materials
1.5.4. Mathematics Book
1.5.5. Mathematics Books for All
1.5.6. Manipulative Materials vs. Digital Materials
1.5.7. Materials
1.5.8. Discussion on the Use of a Calculator
1.5.9. Audiovisual Materials

1.6. Globalized Teaching: Learning Through Projects
1.6.1. Brief Conceptualization
1.6.2. Introduction to Project-Based Learning
1.6.3. Requirements for Working with Mathematics using a Project-Based Learning Approach
1.6.4. A Model Applicable to the Classroom
1.6.5. Project Sheets
1.6.6. Description of Project Objectives
1.6.7. Timing
1.6.8. Implementation
1.6.9. Assessment

1.7. Cooperative Work in the Mathematics Classroom
1.7.1. Brief Conceptualization
1.7.2. Requirements for Working with Mathematics through Cooperative Work
1.7.3. Advantages and Disadvantages in the Mathematics Classroom
1.7.4. Teacher facing Cooperative Work
1.7.5. A Model Applicable to the Classroom
1.7.6. Mathematics Teaching to Develop Cooperative Work
1.7.7. Cooperative Learning Models
1.7.8. Implementation of Cooperative Work
1.7.9. Assessment of Cooperative Work

1.8. Other Methodologies
1.8.1. Singapore Method
1.8.2. Common Core Standards Method
1.8.3. EntusiasMat
1.8.4. Jump Math
1.8.5. ABN
1.8.6. Dialogic Learning
1.8.7. Learning Communities: Reggio Emilia
1.8.8. Learning Communities: Montessori
1.8.9. Analysis of Methodologies

1.9. Attention to Diversity
1.9.1. General Principles of Attention to Diversity
1.9.2. Concept of Curricular Adaptation
1.9.3. Characteristics of Curricular Adaptations
1.9.4. Phases and Components of the Adaptation Process
1.9.5. Responding to Diversity: A Collaborative Effort
1.9.6. Strategies
1.9.7. Resources
1.9.8. Specific Didactic Materials
1.9.9. Technical Resources

1.10. Methodological Proposals for Students with Special Educational Needs

1.10.1. SEN in Mathematics Education
1.10.2. Dyscalculia
1.10.3. ADHD
1.10.4. High Abilities
1.10.5. Recommendations when Difficulties are due to the Nature of Mathematics Itself
1.10.6. Recommendations when Difficulties are due to the Methodological Organization of Mathematics
1.10.7. Recommendations when Difficulties are Due to Internal Student Factors
1.10.8. ICT for the Teaching of SEN Students
1.10.9. Recommended Guidelines for Algorithm Implementation

Module 2. Design and Development of Didactic Materials: Mathematics Workshop/Mathematics Games

2.1. Mathematics Teaching Materials
2.1.1. Introduction
2.1.2. Teaching Resources
2.1.3. Disadvantages of Teaching Materials
2.1.4. Advantages of Teaching Materials
2.1.5. Factors for the Utilization of Didactic Material
2.1.6. Functions of Teaching Materials
2.1.7. Didactic Material in the Teaching-Learning Process
2.1.8. Types of Material
2.2. Introduction to the Design and Development of Teaching Materials
2.2.1. Introduction
2.2.2. Introduction to the Design of Teaching Materials
2.2.3. Establishment of a Didactic Situation
2.2.4. Design and Development of Didactic Material
2.2.5. Didactic material to Support the Teaching-Learning Process
2.2.6. Adequacy of the Material for Teaching Purposes
2.2.7. Assessment of Didactic Material
2.2.8. Self-evaluation
2.3. Manipulative Materials
2.3.1. Introduction
2.3.2. Logic Blocks
2.3.3. The Abacus
2.3.4. Multibase Blocks
2.3.5. Cuisenaire Strips
2.3.6. The Geoplane
2.3.7. Tangram
2.3.8. Meters, Scales and Graduated Glasses
2.3.9. Other Materials
2.4. Use of Manipulative Materials in the Classroom
2.4.1. Active and Participative Methodology
2.4.2. Manipulative Materials
2.4.3. Introducing Manipulative Materials in the Classroom through Challenges
2.4.4. Criteria for Manipulative Materials
2.4.5. Development of the Students
2.4.6. The Teacher as Project Guide
2.4.7. Mathematical Contents for the Elaboration of Manipulative Materials
2.4.8. Classroom Work Project
2.4.9. The Teacher and Teaching Materials
2.5. Numerical Learning Materials
2.5.1. Introduction
2.5.2. Types of Numbers: Natural, Integer, Fractional and Decimal Numbers
2.5.3. Contents
2.5.4. Logical-Mathematical Thinking
2.5.5. Materials for Working with Integers
2.5.6. Materials for Working with Fractions
2.5.7. Materials for Working with Decimals
2.5.8. Materials for Working with Operations
2.5.9. Crafts for Learning Numbers
2.6. Materials for Learning to Measure

2.6.1. Introduction
2.6.2. Units and Instruments for the Measurement of Magnitudes
2.6.3. Contents of the Measurement Block
2.6.4. Didactic Resources
2.6.5. Materials for Working with Units of Length
2.6.6. Materials for Working with Units of Mass
2.6.7. Materials to Work with Capacity or Volume Units
2.6.8. Materials to Work with Surface Units
2.6.9. Materials to Work with Time and Money Units
2.7. Geometric Learning Materials
2.7.1. Block 3: Geometry
2.7.2. Importance of Geometry
2.7.3. Puzzle of the Blind Hen
2.7.4. Square Geoplane
2.7.5. Orient Yourself
2.7.6. The Boat Game
2.7.7. Chinese Tangram
2.7.8. Memory Game
2.8. Comic Books for Learning Mathematics
2.8.1. Introduction
2.8.2. Comic Concept
2.8.3. Comic Structure
2.8.4. Educational Uses of Digital Comics
2.8.5. Objectives Achieved According to Experiences Developed
2.8.6. Proposed Method of Use
2.8.7. How to Use it According to the Teaching Cycles?
2.8.8. Proposed Activities
2.8.9. Comics, ICT and Mathematics
2.9. Audiovisual Resources in the Teaching-Learning of Mathematics
2.9.1. Audiovisual Language: A New Language, A New Method
2.9.2. Benefits of Audiovisual Language in Education
2.9.3. Audiovisual Competence in the Classroom
2.9.4. 10 Principles for the Use of Audiovisuals in the Classroom
2.9.5. Audiovisual Resources and the Teaching of Mathematics
2.9.6. Importance of the Use of New Technologies in Mathematics
2.9.7. Video in Mathematics
2.9.8. Mathematical Photography
2.10. The Game in the Teaching Methods of Mathematics
2.10.1. Introduction
2.10.2. Game Concept
2.10.3. The Importance of the Game
2.10.4. The Importance of Games in Mathematics
2.10.5. Advantages of the Game
2.10.6. Disadvantages of the Game
2.10.7. Phases of the Game
2.10.8. Strategies
2.10.9. Mathematical Games

Module 3. ICT in Pre-school and Primary Education. Development of Interactive Materials for the Classroom Workshops

3.1. Information and Communication Technologies
3.1.1. What are ICTs?
3.1.2. Theoretical Framework
3.1.3. General Characteristics of ICTs
3.1.4. ICT Issues in Education
3.1.5. Need for the Use of ICTs in Educational Institutions
3.1.6. Use of ICT in Educational Centers
3.1.7. ICT Integration Plan
3.2. Needs for the Implementation of ICT in the Classroom
3.2.1. Equipment
3.2.2. Training
3.2.3. Role of the Coordinator
3.2.4. The Teacher and ICT
3.2.5. ICT in Pre-school Classrooms

3.2.6. ICT Projects
3.2.7. ICT in Elementary School Education
3.2.8. ICT in Education: Disadvantages
3.2.9. ICT Assessment

3.3. ICT in Pre-school Education
3.3.1. ICT in Pre-school Classrooms
3.3.2. ICTs in the Legal Framework of Pre-school Education
3.3.3. ICT and Gardner's Multiple Intelligences
3.3.4. Some Possible Uses of ICT in Pre-school
3.3.5. The Computer Corner
3.3.6. Approach to the Potential of ICTs in Pre-school Education
3.3.7. Teaching Methods of Mathematics in Pre-School
3.3.8. ICT Resources for Pre-school Education

3.4. ICT in Elementary School Education
3.4.1. Impacts of ICT in Elementary School Education
3.4.2. Incorporation of ICTs in Education: Possibilities and Challenges
3.4.3. Educational Legislation: ICT in Elementary School Education
3.4.4. Advantages and Disadvantages of ICT Incorporation
3.4.5. New Teaching Methodologies Supported by ICTs: an Active and Constructive Pedagogy
3.4.6. Inclusion of Virtual Platforms in the Teaching-Learning Process
3.4.7. Adaptation of a New Methodology Online and Virtual Teaching
3.4.8. Educational Applications

3.5. Use of ICTs and Active Methodologies
3.5.1. Active Methodologies
3.5.2. Advantages
3.5.3. Educational Principles of Active Methodologies
3.5.4. Active Methodologies with the use of ICT
3.5.5. Project Based Learning
3.5.6. Collaborative and Cooperative Learning
3.5.7. Service Learning in the use of ICT
3.5.8. *Flipped Classroom*
3.5.9. Problem-Based Learning

3.6. IT Resources for the Mathematics Classroom
- 3.6.1. *Tablets* in Education
- 3.6.2. ICT in Elementary School Education, a Formative Proposal
- 3.6.3. Best Tools for your Math Class according to AulaPlaneta
- 3.6.4. ICT Resources for Pre-school Education

3.7. Computer and Internet in Education
- 3.7.1. Computer-Assisted Learning
- 3.7.2. Internet
- 3.7.3. Internet and the Expansion of the Educational Framework
- 3.7.4. Benefits of the Internet in Education
- 3.7.5. Disadvantages of the Internet on Education
- 3.7.6. Mathematics on the Internet
- 3.7.7. Websites to Work on Mathematics

3.8. Gamification in the Classroom
- 3.8.1. What is Gamification and Why Is It Important?
- 3.8.2. Elements of Gamification
- 3.8.3. Gamification Objectives
- 3.8.4. Fundamentals of Gamification in the Teaching-Learning Process
- 3.8.5. How to Gamify in Education?
- 3.8.6. Gamification in Pre-school Education
- 3.8.7. Rewards Classification
- 3.8.8. Gamification vs. Ludification
- 3.8.9. Negative Aspects of Gamification
- 3.8.10. ICT Use in Gamification

3.9. ICT Tools and Resources for Assessment
- 3.9.1. Evaluation
- 3.9.2. ICT as a Means of Assessment
- 3.9.3. ICT Assessment Tools
- 3.9.4. Other Tools to Assess in a Different Way

3.10. ICT in the Attention to Special Needs Education
- 3.10.1. How ICT Supports Students with SEN?
- 3.10.2. ICT for Students with Physical Disabilities
- 3.10.3. ICT in students with Mental Disabilities
- 3.10.4. ICT for Students with Auditory Disabilities
- 3.10.5. ICT for Students with Visual Disabilities
- 3.10.6. Pervasive Developmental Disorders
- 3.10.7. ICT Resources for SEN

Don't think twice and opt for a cutting-edge program of the highest level with which you will achieve perfect mastery of the design and development of teaching materials using ICT"

05

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.

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.

"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 quality of teaching, quality of materials, course structure and objectives is excellent. Not surprisingly, the institution became the best rated university by its students on the Trustpilot review platform, 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.

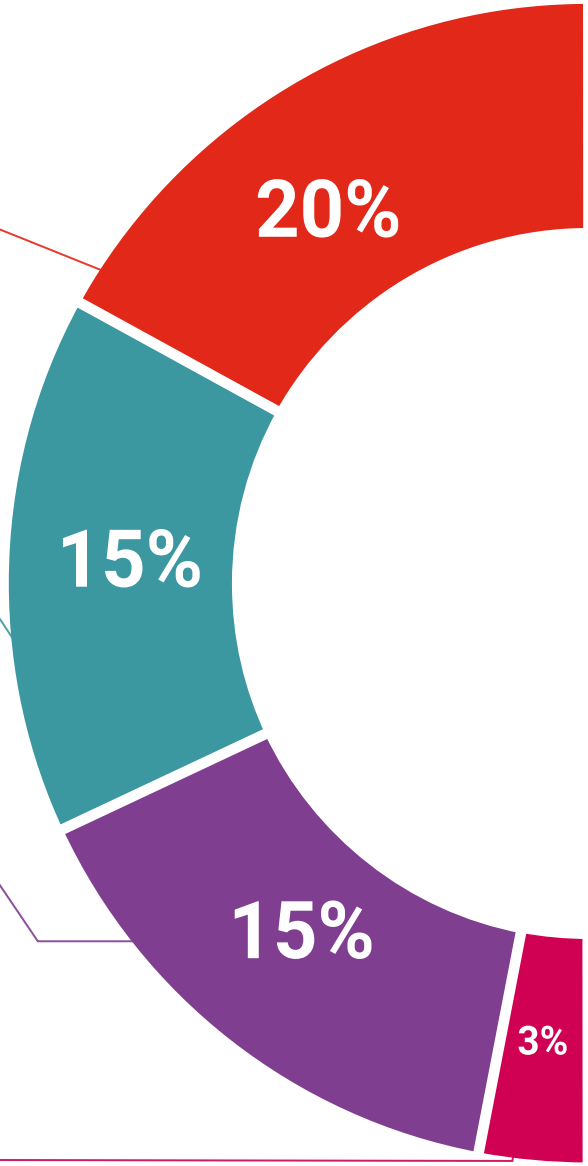
Interactive Summaries

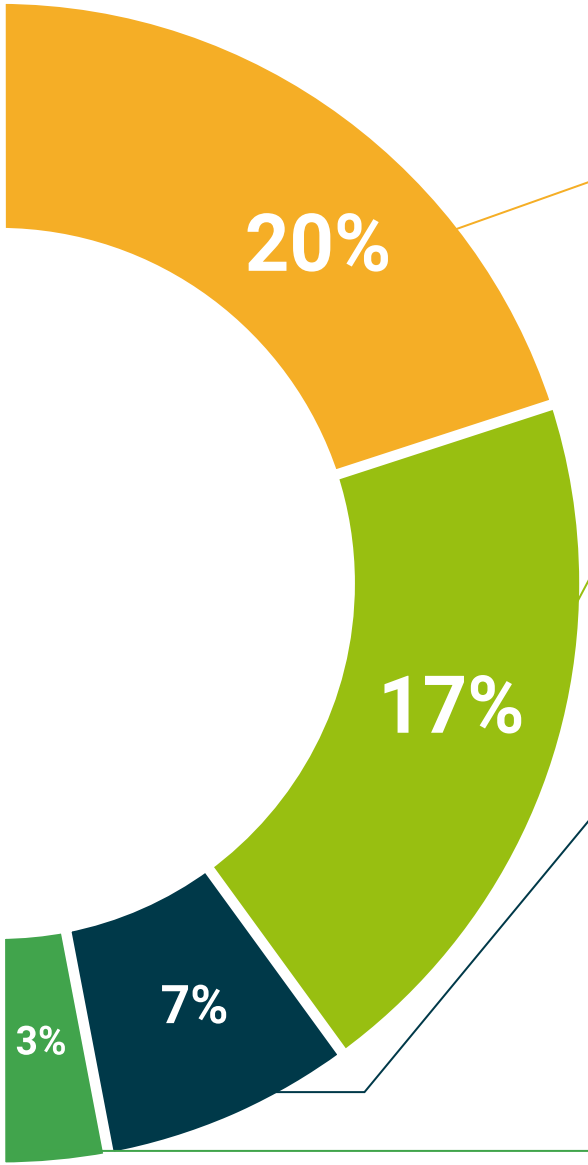
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

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 for 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.

06

Certificate

The Postgraduate Diploma in ICT Resources for Pre-School and Primary Mathematics guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 **Postgraduate Diploma in ICT Resources for Pre-School and Primary Mathematics** 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.

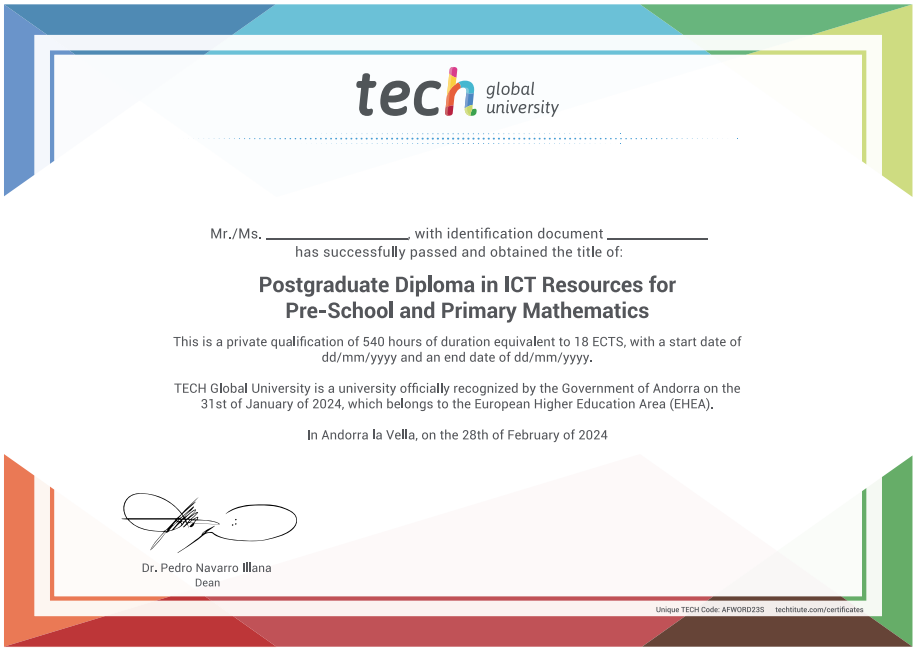
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Professional Master's Degree in ICT Resources for Pre-School and Primary Mathematics**

Modality: **online**

Duration: **3 months**

Accreditation: **18 ECTS**


tech global university

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

Postgraduate Diploma in ICT Resources for Pre-School and Primary Mathematics

This is a private qualification of 540 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

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

Dr. Pedro Navarro Illana
Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates

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

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Postgraduate Diploma

ICT Resources for Pre-School and Primary Mathematics

- Modality: **online**
- Duration: **3 months**
- Certificate: **TECH Global University**
- Accreditation: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma
ICT Resources for Pre-School and Primary Mathematics

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