Professional Master's Degree

Technology and Computer Science Teacher Training in High School Education

tech global university

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Professional Master's Degree
Technology and Computer Science Teacher Training in High School Education

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

Website: **www.techtitute.com/us/education/professional-master-degree/master-technology-computer-science-teacher-training-high-school-education**

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01

Introduction

Teaching in high school is crucial to prepare young people for the future and contribute to the creation of a knowledge-based society. This program gathers specific information to update teachers in the teaching of Technology and Computer Science. This is a unique opportunity for professionals who wish to deepen their knowledge in this field. Therefore, through a rich and 100% online program, you will be able to develop real case exercises to address in the classroom, which will prepare you for the future challenges of the industry.

A quality program, created by experts in the field who , will put their professional and teaching experience at your service to accompany you throughout your Training"

The Technology and Computer Science Teacher Training Program in High School Education is designed to improve the student's competencies as a future teacher through the most innovative educational technology and on a hybrid learning basis.

This degree is distinguished by the fact that its contents can be taken 100% online, adapting to the needs and obligations of the student, in an asynchronous and completely self-manageable manner. The student will be able to choose which days, at what time and for how long to dedicate to the course of the contents of the program. Always in tune with the skills and capabilities dedicated to it.

The order and distribution of the subjects and their units is specially designed to allow each student to choose their own schedule and self-manage their time. For this purpose, you will have at your disposal theoretical materials presented through enriched texts, multimedia presentations, exercises and guided practical activities, motivational videos, master classes and case studies, where you will be able to evoke knowledge in an orderly manner and work on decision making that demonstrates your high level education within this field of teaching.

This **Professional Master's Degree in Technology and Computer Science Teacher Training in High School Education** contains the most complete and up-to-date educational program on the market. The most important features include:

- The development of practical cases presented in simulated scenarios by experts in the field of study, where the student will evoke in an orderly manner the knowledge learned and demonstrate the acquisition of the competencies
- 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
- The latest developments on the educational task of the high school teacher
- Practical exercises where to perform the self-assessment process to improve learning, as well as activities at different levels of competence, according to Miller's model
- Special emphasis on innovative methodologies and teaching research
- 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

TECH presents the Professional Master's Degree in Technology and Computer Teacher Training in High School Education with the highest quality in the university market"

This program is the best investment you can make in selecting a refresher program for two reasons: in addition to updating your knowledge as a High School, you will obtain a qualification from TECH Global University"

Choose your specialty and take the program that will lead you to in your area of knowledge.

This 100% online program will allow you to combine your studies with your professional work while increasing your knowledge in this field.

It includes in its teaching staff professionals belonging to the field of teacher training, who bring to this training the experience of their work, as well as recognized specialists from 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 immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the teacher must try to solve the different situations of professional practice that arise throughout the Professional Master's Degree. For this purpose, the teacher will be assisted by an innovative interactive video system created by leading experts in the field of Training and Career Guidance with extensive teaching experience.

02

Objectives

The program in Technology and Computer Science Teacher Training in High School Education is oriented to facilitate the performance of the professional dedicated to teaching with the latest advances and most innovative treatments in the sector.

This program will confront you with real challenges that will allow you to learn in context, learning in a practical way with the best current study methods"

General Objective

- Provide the future teacher with the acquisition of specialized an educational that will increase their performance level and update their knowledge in High School teaching

An impressive teaching staff, made up of professionals from different fields of expertise, will be your teachers during your education: a unique opportunity not to be missed"

Specific Objectives

Module 1. Learning and Development of Personalities

- Get to know the relationship between learning and development, education and culture
- Understand the importance of schooling in development
- Study the concept of brain plasticity and plasticity windows
- Gain knowledge about the essential social factors in learning: imitation, shared attention and empathic understanding
- Identify the stages of development
- Understand the concept of personality

Module 2. Society, Family and Education

- Know the term integral education
- Conceptualize educational guidance
- Explain the origin of educational guidance and the main figures of educational guidance
- Explain the areas of intervention of educational guidance
- Identify the models of intervention of educational guidance
- Enumerate the functions of guidance in the educational center
- Enunciate the principles of the guidance action

Module 3. Supplements for the disciplinary training of technology and computer science

- Expose the concepts of technology and Computer Science and inquire about them
- Know the importance of technology in society, its advantages and disadvantages and its main characteristics
- Learn the concept of technological renovation, making a historical tour to differentiate the different stages of evolution of technology and computer science
- Understand the social relevance of knowing the technological and computer science development, especially in the educational field
- Understand the concept of educational technology by different authors and their most relevant contributions
- Know how educational technology has evolved over the years and its different phases. and its different phases

Module 4. Technology and computer science syllabus design

- Define the concept of curriculum
- Detail the elements that make up the curriculum
- Explain the concept of curriculum design
- Describe the levels of concreteness of the curriculum
- Explain the different models of the curriculum
- Determine the aspects that should be taken into account in the elaboration of a teaching program

Module 5. Technology and computer science didactics

- Understand the origin and evolution of didactics
- Clarifying the definition of the term didactics
- Expose the different learning theories most relevant in the world of education and the main related authors
- Differentiate learning theories and know their main characteristics
- Talk about behaviorism, cognitivism and constructivism
- Expose the concepts of classical conditioning and operant conditioning and their relationship in learning theories
- Explain what learning for the digital era and the theory of connectivism consist of
- Know the social theories of learning, their principles and their relationship with digital learning

Module 6. Teaching Innovation and Initiation to Educational Research

- Get to know the fields of innovation in the educational context
- Discover learning communities
- Expose the obstacles and challenges of innovation in the educational context
- Explain how teachers learn and their role change
- Demonstrate the factors that favor professional learning and development
- Delve into the professional learning of teachers
- Introduce professional learning and meeting spaces, such as: conferences, congresses, innovation days, professional networks, communities of practice and MOOCS (Massive Open Online Courses)

Module 7. Educational Processes and Contexts

- Learn about the White Paper as the basis for the General Education Law
- Explain the concept of White Paper
- Identify the different educational laws in chronological order
- Expose the determinants of the educational reform
- Present the general and fundamental principles of the educational reform
- Mention the main characteristics of the Moyano Law
- Show the particularities of the General Education Law: preamble, purposes, educational levels, educational centers and teachers

Module 8. Inclusive Education and Attention to Diversity

- Develop an overview of the conceptions and formation of the teacher profile throughout history
- Learn about the institutions and training plans of each moment
- Conceptualize the current profile of teachers and their training needs

Module 9. Creativity and Emotional Education in the Classroom

- Know the difference between emotion and intelligence
- Understand emotional intelligence and its importance in the individual
- Get to know the importance of a teacher with very good self-regulation and emotional intelligence, from the point of view of Mayer and Salovey

Module 10. Neuroeducation

- Understand experience at the neural level
- Discover learning at the neuronal level

Module 11. Communication in the Classroom

- Communicate effectively with all members of the classroom
- Use images and videos as support material in the classroom

03

Competencies

After passing the assessments of the Professional Master's Degree in Technology and Computer Science Teacher Training in High School Education, the professional will have acquired the necessary skills for a quality and up-to-date practice based on the most innovative teaching methodology.

This program will allow you to learn the new tools used in Teacher Training to offer better service to your students"

General Skills

- Gain knowledge about the curricular contents of the subjects related to the corresponding teaching specialization, as well as the body of didactic knowledge regarding the respective teaching and learning processes For professional training will include knowledge of the respective professions
- Plan, develop and evaluate the teaching and learning process, promoting educational processes that facilitate the acquisition of the skills of the respective teachings, taking into account the level and previous preparation of the students, as well as the orientation of the students, both individually and in collaboration with other teachers and professionals of the center
- Search, obtain, process and communicate information (oral, printed, audiovisual, digital or multimedia), transform it into knowledge and apply it in teaching and learning processes in the subjects of their specialization
- Determine the syllabus to be implemented in an educational center by participating in its collective planning; develop and apply teaching methodologies, both group and personalized, adapted to the diversity of the students
- Design and develop learning spaces with special attention to equity, emotional and values education, equal rights and opportunities between men and women, citizenship training and respect for human rights that facilitate life in society, decision-making and the construction of a sustainable future
- Acquire strategies to stimulate student effort and promote their ability to learn by themselves and with others, and develop thinking and decision-making skills that facilitate autonomy, confidence and personal initiative
- Gain knowledge about the processes of interaction and communication in the classroom, master the social skills and abilities necessary to promote learning and coexistence in the classroom, and deal with problems that may arise in the classroom
- Design and carry out formal and non-formal activities that contribute to making the center a place of participation and culture in the environment where it is located; develop the functions of tutoring and guidance of students in a collaborative and coordinated manner; to participate in the evaluation, research and innovation of teaching and learning processes
- Get to know the regulations and institutional organization of the educational system and quality improvement models applicable to educational centers
- Know and analyze the historical characteristics of the teaching profession, its current situation, perspectives and interrelation with the social reality of each era
- Inform and advise families about the teaching and learning process and about the personal, educational and professional orientation of their children

Specific Skills

- Get to know the characteristics of the students, their social contexts and motivations
- Understand the personality development of these students and the possible dysfunctions that affect learning
- Elaborate proposals based on the acquisition of knowledge, skills and intellectual and emotional skills
- Identify and plan for the resolution of educational situations that affect students with different abilities and learning rhythms
- Know the processes of interaction and communication in the classroom and in the center, address and solve possible problems
- Know the historical evolution of the educational system in our country
- Know and apply resources and strategies for information, tutoring and academic and professional orientation
- Promote actions of emotional education in value and citizenship training
- Participate in the definition of the educational project and in the general activities of the center according to criteria of quality improvement, attention to diversity, prevention of learning and coexistence problems
- Relate education to the environment and understand the educational role of the family and the community, both in the acquisition of skills and learning and in education in respect for rights and freedoms, equal rights and opportunities between men and women and in the equal treatment and non-discrimination of people with disabilities
- Get to know the historical evolution of the family, its different types and the incidence of the family context in education
- Acquire social skills in family relations and orientation

- Know the formative and cultural value of the subjects corresponding to the specialization and the contents that are studied in the respective teachings
- Gain knowledge about the history and recent developments of the subjects and their perspectives in order to be able to transmit a dynamic vision of them
- Know the contexts and situations in which the different curricular contents are used or applied
- In the case of psycho-pedagogical and professional orientation, to know the processes and resources for the prevention of learning and coexistence problems, evaluation processes and academic and professional orientation
- Get to know the theoretical-practical developments of teaching and learning of the subjects corresponding to the specialization
- Transform the syllabus into activity and work programs
- Acquire criteria for the selection and elaboration of educational materials
- Foster a climate that facilitates learning and values the contributions of the students
- Integrate audiovisual communication and multimedia education in the teaching and learning process
- Get to know evaluation strategies and techniques and to understand evaluation as an instrument of regulation and stimulus to effort
- Get to know and apply innovative teaching proposals in the area of specialization
- Critically analyze the performance of teaching, good practices and guidance using quality indicators
- Identify the problems related to the teaching and learning of the subjects of the specialization and propose alternatives and solutions
- Know and apply basic methodologies and techniques of educational research and evaluation and be able to design and develop research, innovation and evaluation projects

- Acquire experience in the planning, teaching and evaluation of the subjects corresponding to the specialization
- Master the social skills and abilities necessary to foster a climate that facilitates learning and coexistence
- Participate in the proposals for improvement in the different areas of performance
- Summarize the training acquired throughout all the courses described above and demonstrate the acquisition of the competences of the other subjects
- Demonstrate a command of the English language corresponding to level B1 according to the Common European Framework of Reference for Languages
- Get to know the psycho-pedagogical characteristics of the students in order to be able to evaluate them and issue the required reports
- Know the measures of attention to diversity that can be adopted in order to be able to give the necessary advice in each case
- Analyze the organization and functioning of a center to coordinate the personal, educational and professional orientation of students in collaboration with the members of the school community
- Develop the necessary skills and techniques to be able to adequately advise families about the development and learning process of their children
- Identify public services and community entities with which the center can collaborate and promote and plan, in collaboration with the management team, the necessary actions for a better attention of the students

04

Course Management

The program includes in its teaching staff experts of reference in Teacher Preparation who bring to this degree their work experience. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.

Learn about the latest advances in Teacher Training from leading experts in the field"

Management

Dr. Barboyón Combey, Laura

- Teacher of Primary Education and postgraduate studies
- Teacher in postgraduate university studies of High School Teacher Formation
- Teacher of Primary Education in several schools
- Doctor in Education from the University of Valencia
- Master's Degree in Psychopedagogy from the University of Valencia
- Degree in Primary Education with a major in English Teaching from the Catholic University of Valencia San Vicente Mártir

05

Structure and Content

The structure of the contents has been designed by the best professionals in the Teacher Preparation field, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed and studied, and with extensive knowledge of new technologies applied to teaching.

We offer you the most complete and up-to-date educational program on the market. We strive for excellence and for you to achieve it too"

Module 1. Learning and Development of Personalities

1.1. Introduction: Relationship between Learning and Development, Education and Culture
- 1.1.1. Introduction
- 1.1.2. The Common Concept of Psychological Development
- 1.1.3. An Alternative to the Common Concept of Psychological Development: the Social and Cultural Nature of Development
- 1.1.4. The Role of Education in Psychological Development
- 1.1.5. Schooling as an Essential Context for Psychological Development
- 1.1.6. Essential Social Factors in Learning
- 1.1.7. Stages of Development
- 1.1.8. Key Developmental Processes

1.2. Conceptions of Learning and Learner Development
- 1.2.1. Concept of Learning
- 1.2.2. Main Theories of Learning and Development
  - 1.2.2.1.Theories of psychoanalysis
    - 1.2.2.1.1. Freud's Theory
    - 1.2.2.1.2. Erikson's Psychosocial Theory
  - 1.2.2.2. Behaviorist Theories
    - 1.2.2.2.1. Pavlov's Classical Conditioning Theory
    - 1.2.2.2.2. Skinner's Operating Conditioning Theory
  - 1.2.2.3. Cognitive Theories
    - 1.2.2.3.1. Information Processing Theory
      - 1.2.2.3.1.1. Robert Gagné's Instructional Theory
    - 1.2.2.3.2. Constructivism
      - 1.2.2.3.2.1. Verbal-Meaningful Learning Theory of David Ausubel
      - 1.2.2.3.2.2. Jean Piaget's Genetic Epistemology
      - 1.2.2.3.2.3. Lev Vygotsky's Sociocultural Cognitive Theory
      - 1.2.2.3.2.4. Jerome Bruner's Discovery Learning
  - 1.2.2.4. Socio-Cognitive Theories
    - 1.2.2.4.1. Bandura's social-Cognitive Theory

1.3. Characterization of the Adolescence Stage: Physical and Sexual Development
- 1.3.1. Puberty and Adolescence
  - 1.3.1.1. Puberty
  - 1.3.1.2. Cardiac Catheterization
- 1.3.2. Psychological Effects of Puberty
- 1.3.3. Early Developing Adolescents and Late Developing Adolescents
  - 1.3.3.1. Precocious Puberty
  - 1.3.3.2. Delay of Puberty
- 1.3.4. Changing Patterns of Sexual Behavior
- 1.3.5. The Context and Timing of Adolescent Sexual Behavior
- 1.3.6. Love Affair and Intimacy

1.4. Psychological Dimensions related to School Learning: Social and Moral Development
- 1.4.1. Main Socializing Agents
  - 1.4.1.1. The Family
    - 1.4.1.1.1. The Concept of Family
    - 1.4.1.1.2. The Adolescent and their Family
  - 1.4.1.2. The Peer Group
  - 1.4.1.3. Educational Centers
  - 1.4.1.4. The media
- 1.4.2. Risks of Social Media
- 1.4.3. Development of Moral Concepts. Various Theoretical Models
  - 1.4.3.1. Piaget
  - 1.4.3.2. Kohlberg
- 1.4.4. Factors Influencing Adolescent Moral Development
  - 1.4.4.1. Differences Between Genders
  - 1.4.4.2. Intelligence
  - 1.4.4.3. At Home
  - 1.4.4.4. Friends

1.5. Psychological Dimensions Related to School Learning: Intelligence
- 1.5.1. The Advent of Formal Thinking
  - 1.5.1.1. Characteristics of Formal Thinking
  - 1.5.1.2. Hypothetic-Deductive Thinking and Propositional Reasoning
- 1.5.2. Criticisms to Piaget's View

1.5.3. Cognitive Changes
1.5.3.1. The Development of Memory
1.5.3.1.1. Sensory Memory
1.5.3.1.2. Short-Term Memory (STM)
1.5.3.1.3. Long-Term Memory (LTM)
1.5.3.2. The Development of Memory Strategies
1.5.3.3. The Development of Metacognition
1.5.3.3.1. The Development of Metacognition
1.5.3.3.2. Knowledge and Metacognitive Control
1.5.4. Intelligence
1.5.4.1. Cattell's Fluid and Crystallized Intelligence
1.5.4.2. Sternberg Triarchic Theory
1.5.4.3. Gardner's Multiple Intelligences
1.5.4.4. Goleman's Emotional Intelligence
1.5.4.5. Wechsler Scale

1.6. Psychological Dimensions related to School Learning: Identity, Self-Concept, and Motivation
1.6.1. Self-Concept
1.6.1.1. Definition of Self-Concept
1.6.1.2. Factors Associated with the Development of Self-Concept
1.6.2. Self-esteem
1.6.3. Theoretical Approaches to Identity Development
1.6.3.1. Different Ways of Elaborating Identity
1.6.4. Motivation and Learning

1.7. The Teaching-Learning Process in Adolescence: General Principles
1.7.1. Ausubel's Theory of Meaningful Verbal Learning
1.7.1.1. Types of Learning in the School Context
1.7.1.2. What is Already Known and the Desire to Learn: Conditions for Constructing Meaning
1.7.1.3. The Processes of Assimilation of New Contents.
1.7.1.4. A Review of the Theory Thirty Years Later
1.7.2. Processes of Knowledge Construction: The Constructivist Theory of Teaching and Learning
1.7.2.1. School Education: A Social and Socializing Practice
1.7.2.2. The Construction of Knowledge in the School Context: The Interactive Triangle
1.7.2.3. The Processes of Knowledge Construction and the Mechanisms of Educational Influence
1.7.3. Why Do Only Humans Have Teaching?

1.8. The Teaching-Learning Process in Adolescence: Construction of Knowledge in the Classroom and Teacher/Student Interaction
1.8.1. Teacher Effectiveness
1.8.2. Teaching Styles
1.8.3. Teaching Models
1.8.4. The Role of the Teacher
1.8.5. Expectations of the Teacher and the Student

1.9. The Teaching-Learning Process in Adolescence. Processes of Knowledge Construction and Peer-to-Peer Interaction
1.9.1. Peer Interaction and Cognitive Development
1.9.2. Cooperative Learning
1.9.2.1. The Use of Cooperative Learning as a Didactic Method

1.10. Attention to Diversity and Educational Needs in the Adolescence Stage
1.10.1. Historical Background
1.10.2. The Warnock Report
1.10.3. The Concept of Special Educational Needs
1.10.4. The Causes of SEN
1.10.5. Classification of SEN
1.10.6. Learning Difficulties derived from Motor, Visual and Hearing Impairment. Educational Intervention
1.10.7. Learning Difficulties derived from Autism (ASD), Attention Deficit Hyperactivity Disorder (ADHD), Intellectual Disabilities (IDD) and High Abilities. Educational Intervention
1.10.8. Behavioral Disorders in Childhood and Adolescence
1.10.8.1. Epidemiology and Risk Factors for Behavioral Disorders
1.10.8.2. Clinical Features and Forms of Presentation

1.10.9. Main Manifestations of Behavioral Disorders
1.10.9.1. Attention Deficit Hyperactivity Disorder (ADHD)
1.10.9.2. Dissocial Disorder (DD)
1.10.9.3. Oppositional Defiant Disorder (ODD)
1.10.10. An Example of an Instrument to Detect Behavioral Disorders in the Classroom
1.10.11. Proposals for Therapeutic Intervention in the Classroom
1.10.11.1. Attention Deficit Hyperactivity Disorder (ADHD)
1.10.11.2. Oppositional Defiant Disorder (ODD) and Dissocial Disorder (DD)
1.11. Relationships in Adolescence and Conflict Management in the Classroom
1.11.1. What is Mediation
1.11.1.1. Types of Mediation
1.11.1.1.1. School Mediation
1.11.1.1.2. Family Mediation
1.11.1.2. Insight Theory
1.11.1.3. The Enneagram
1.11.2. Strengths and Weaknesses of Implementing a Mediation Program
1.12. Principle of Personalized Education and Forms of Action
1.12.1. Historical Evolution of Special Education
1.12.1.1. The United Nations (UN)
1.12.1.2. The Universal Declaration of Human Rights (UDHR)
1.12.2. The Localization Dilemma
1.12.3. Educational Inclusion
1.12.4. The Dilemma of Differences
1.12.5. Personalized Education
1.12.6. Personal Learning Design
1.12.7. Conclusions
1.12.7.1. Learning by Doing

Module 2. Society, Family and Education

2.1. The Guidance Function of the Educational Center
- 2.1.1. Educational Counselling
  - 2.1.1.1. Introduction
  - 2.1.1.2. Concept of Educational Guidance
  - 2.1.1.3. Guidance Functions in the Educational Center
  - 2.1.1.4. Origin of Educational Guidance
  - 2.1.1.5. Areas of Intervention
    - 2.1.1.5.1. Professional Guidance
    - 2.1.1.5.2. Development Guidance
    - 2.1.1.5.3. School Guidance
    - 2.1.1.5.4. Guidance in the Attention to Diversity
  - 2.1.1.6. Intervention Models
    - 2.1.1.6.1. Counseling Model
    - 2.1.1.6.2. Services Model
    - 2.1.1.6.3. Program Model
    - 2.1.1.6.4. Consultation Model
    - 2.1.1.6.5. Technological Model
- 2.1.2. Principles of Guiding Action

2.2. The Tutor-Teacher and the Tutorial Action
- 2.2.1. The Tutor's Profile and Competences
- 2.2.2. Tutorial Action
- 2.2.3. The Guidance Department
  - 2.2.3.1. Organization of the Guidance Department
  - 2.2.3.2. Composition of the Guidance Department
  - 2.2.3.3. Functions of the Guidance Department
  - 2.2.3.4. Functions of the Members of the Guidance Department
    - 2.2.3.1.1. Functions of the Head of the Guidance Department
    - 2.2.3.1.2. Functions of the Support Teacher
    - 2.2.3.1.3. Functions of the Therapeutic Pedagogy and Hearing and Language Teachers
    - 2.2.3.1.4. Functions of the Teacher of Occupational Training and Guidance
- 2.2.4. Guidance and Tutorial Action in Occupational Training
- 2.2.5. The Holland Typology's Model

2.3. Tutorial Action Tools
- 2.3.1. Introduction
- 2.3.2. The Tutorial Action Plan (TAP)
  - 2.3.2.1. Modalities of Autonomy
    - 2.3.2.1.1. Pedagogical Autonomy
    - 2.3.2.1.2. Managerial Autonomy
    - 2.3.2.1.3. Organizational Autonomy
- 2.3.3. Information and Communication Technologies (ICT) in Tutorial Action
  - 2.3.3.1. Social Changes
  - 2.3.3.2. Changes in Education
  - 2.3.3.3. ICT used in Tutorial Action
    - 2.3.3.3.1. WebQuests
    - 2.3.3.3.2. Blogs
    - 2.3.3.3.3. Webinars
    - 2.3.3.3.4. Wikis
    - 2.3.3.3.5. E-mail
    - 2.3.3.3.6. Discussion Forums
  - 2.3.3.4. Advantages of Using ICT in Tutorial Action
  - 2.3.3.5. Disadvantages of the Use of ICT in Tutorial Action

2.4. The Relationship of the Teacher-Tutor with the Student
- 2.4.1. The Individualized Interview as the Main Tool
  - 2.4.1.1. Importance of Communication
  - 2.4.1.2. Interview between the Tutor Teacher and the Student
  - 2.4.1.3. The Interview in the Aid Relationship
  - 2.4.1.4. Interviewer Skills
  - 2.4.1.5. Types of Interviews
    - 2.4.1.5.1. According to the Number of Participants
    - 2.4.1.5.2. According to the Format
    - 2.4.1.5.3.Depending on the mode or channel

2.4.2. Group Dynamics
2.4.2.1. Group Dynamics: Some Examples of Techniques
2.4.2.1.1. Discussion Groups
2.4.2.1.2. Role-Playing
2.4.2.1.3. Dialogical Pedagogical Discussion
2.4.2.1.4. Cineforum
2.4.2.2. Benefits of Applying Group Dynamics
2.4.3. Techniques for the Management of Coexistence
2.4.3.1. Learning Values and Norms
2.4.3.2. Social Emotional Education and Classroom Climate
2.4.3.3. Strategies that Facilitate School Coexistence
2.4.3.4. Programs to Educate in Coexistence
2.5. Family and School Centers
2.5.1. Introduction
2.5.2. The Evolution of the Family and Society
2.5.3. Demands Made by the Family to the Educational Center and Vice-Versa
2.5.3.1. Demands from the School to the Family
2.5.3.2. Demands from the Family to the School
2.5.4. Family-Educational Center Communication Channels: the School for Parents
2.5.4.1. School for Parents
2.6. The Family Interview
2.6.1. Introduction
2.6.1.1. The Ecological Theory of Bronfenbrenner
2.6.2. The Family Interview
2.6.2.1. Keys to an Effective Interview
2.6.2.2. Emotional Education.
2.6.2.3. Classification of Interviews
2.6.3. Structure of Interviews
2.6.4. Factors Involved in Family Interview
2.6.5. Steps in Family Interview
2.6.6. Interview Techniques
2.6.6.1. Educational Coaching
2.6.6.2. Context
2.6.6.3. Origins of Coaching
2.6.6.4. Principles of Coaching
2.6.6.5. Models of Coaching
2.6.6.6. Agents Involved in the Coaching Process
2.6.6.7. Benefits of Coaching

Module 3. Supplements for the disciplinary training of technology and computer science.

3.1. Technology in society. Evolution of technology education
3.1.1. Previous Concepts
3.1.2. Importance of Technologies in society
3.1.3. Technological renovation
3.1.4. Importance of teaching technological and computer science development in society
3.1.5. Historical Evolution of Educational Technology
3.1.6. Conceptualization of Educational Technology
3.2. Professional Formation
3.2.1. Fields of Vocational Training
3.2.2. The demand for technology professionals
3.2.3. Competencies to create technological solutions
3.2.4. Best practices in the promotion of STEM vocations
3.3. Information and Knowledge Management
3.3.1. Searching and retrieving information: search engines, social bookmarking and aggregators
3.3.2. Databases and repositories for teachers and students
3.3.3. Knowledge management resources

3.4. Generating and distributing knowledge with ict. Communication with ict in technology
- 3.4.1. Tools for content generation
- 3.4.2. Means for content distribution
- 3.4.3. Production and editing of multimedia material
- 3.4.4. Social Media. Microblogging
- 3.4.5. Content Curation
- 3.4.6. The teacher as community manager

3.5. Evolution of technology education
- 3.5.1. What are PLE and What Are They For?
- 3.5.2. Applications and tools
- 3.5.3. Digital identity and its management

3.6. Tools for the creation and management of educational virtual communities
- 3.6.1. Building collective intelligence: virtual communities
- 3.6.2. Types and examples of virtual communities

3.7. Free software in education. E-learning platforms. Mobile and ubiquitous pedagogy
- 3.7.1. Free Software. Educational Applications
- 3.7.2. E-learning platforms. Examples of Use
- 3.7.3. B-learning in Secondary and Vocational Training
- 3.7.4. Mobile learning
- 3.7.5. Tablets and smartphones
- 3.7.6. Learning management with an app. Creation of mobile applications
- 3.7.7. Strengths and weaknesses of the use of mobile applications in the classroom

3.8. Criteria for the selection of educational tools. Instructional design with ICT
- 3.8.1. Design of educational tools
- 3.8.2. Main criteria for the selection of educational tools
- 3.8.3. Essential aspects of instructional design
- 3.8.4. Design of an ICT-supported classroom training proposal.
- 3.8.5. Design of materials and resources: tools

3.9. Managing creativity and emotional intelligence in technology
- 3.9.1. Creative thinking
- 3.9.2. Creativity and problem solving in technology
- 3.9.3. Methods for the development of creativity
- 3.9.4. Some resources
- 3.9.5. Emotional intelligence, its elements and ways of manifestation
- 3.9.6. Importance of emotional intelligence management
- 3.9.7. Implications of the development of emotional intelligence in the teaching profession.
- 3.9.8. Techniques and strategies for the development of emotional intelligence inside and outside the technology classroom.

3.10. Nature as an inspiration for technological development
- 3.10.1. Nature as an inspiration for technological development
- 3.10.2. Planned Obsolescence
- 3.10.3. Examples and best practices with technology

Module 4. Technology and computer science syllabus design

4.1. Curriculum and its Structure
- 4.1.1. School Curriculum: Concept and Components
- 4.1.2. Curriculum Design: Concept, Structure and Functioning
- 4.1.3. Levels of Curriculum Specification
- 4.1.4. Curriculum's Model
- 4.1.5. Educational Programming as a Working Tool in the Classroom.

4.2. Legislation as a Guide to Curriculum Design and Key Competencies
- 4.2.1. Review of Current National Educational Legislation
- 4.2.2. What are Competencies?
- 4.2.3. Types of Skills
- 4.2.4. Key Competencies
- 4.2.5. Description and Components of Key Competencies

4.3. The Spanish Education System. Teaching Levels and Modalities
- 4.3.1. Education System: Interaction between Society, Education and the School System
- 4.3.2. The Educational System: Factors and Elements
- 4.3.3. General Characteristics of the Spanish Educational System
- 4.3.4. Configuration of the Spanish Educational System
- 4.3.5. Secondary Education
- 4.3.6. Baccalaureate
- 4.3.7. Artistic Education
- 4.3.8. Language Teaching
- 4.3.9. Sports Education Adult Education

4.4. An analysis of the curriculum for technology and computer science
- 4.4.1. PGA Aspects in Technology and Information Technology
- 4.4.2. Subject Blocks by Educational Stages
- 4.4.3. Blocks of Contents by Subject

4.5. Didactic Programming: Basic Elements
- 4.5.1. Context
- 4.5.2. Objectives Key Competencies
- 4.5.3. Contents

4.6. Teaching Programming: Methodology, Expected Results, subjects, Evaluation and Complementary Elements
- 4.6.1. Evaluation Criteria and Learning Results
- 4.6.2. Methodology
- 4.6.3. Materials, Resources
- 4.6.4. Evaluation: procedures and grading criteria other sections: ICT and sociocultural activities, measures for attention to diversity and curricular adaptations.

4.7. Didactic unit in high school.
- 4.7.1. Definition of Teaching Unit
- 4.7.2. Elements that Make Up a Teaching Unit
- 4.7.3. Methodology

4.8. Teaching Unit in Vocational Training and Adult Education
- 4.8.1. Definition of Working Unit
- 4.8.2. Elements that Make Up a Teaching Unit
- 4.8.3. Methodology

4.9. Programming of a Teaching Unit in High School, Vocational Training and Adult Education
- 4.9.1. How to Program a Teaching Unit in High School Education?
- 4.9.2. How to Program a Teaching Unit in High School (High School
- 4.9.3. How to Program a Work Unit in Vocational Training?
- 4.9.4. How to Program a Teaching Unit in Adult Education

4.10. Examples of Didactic Unit
- 4.10.1. Methods
- 4.10.2. Typology of Activities
- 4.10.3. Grouping
- 4.10.4. Resources to be Used
- 4.10.5. Work Unit in Basic Vocational Training
- 4.10.6. Teaching Unit in High School Education for Adults

Module 5. Technology and computer science didactics

5.1. General Didactics and Learning Theories
- 5.1.1. Concept
- 5.1.2. Learning Theories
- 5.1.3. Learning Theories for the Digital Age
- 5.1.4. Social Learning Theories

5.2. Learning Techniques and Strategies scientific-technological
- 5.2.1. Inquiring Learning and ICT
- 5.2.2. Learning Techniques and Strategies scientific-technological

5.3. Learning techniques and strategies Activate applied to the specialty.
- 5.3.1. Collaborative- Learning Cooperative Learning
- 5.3.2. Learning by doing
- 5.3.3. Learning by participating

5.4. Teaching methodologies for technology education and innovative methodologies.
- 5.4.1. Academic-expository model
- 5.4.2. Problem-Solving Models
- 5.4.3. Project-Solving Models
- 5.4.4. Discovery Difficulties Model
- 5.4.5. Incidentally learning models
- 5.4.6. Interdisciplinary model
- 5.4.7. Model with specific didactic materials
- 5.4.8. Research or Inquiry Model
- 5.4.9. Profitability Analysis Models
- 5.4.10. Game-Based Learning (GBL)
- 5.4.11. Online applications: Clash of clans

Clash of clans Flipped Classroom

5.5. Mainly Theoretical Focus of Learning Difficulties
- 5.5.1. Neurobiological or Organic Theories
- 5.5.2. Theories of Cognitive Deficit Processes
- 5.5.3. Psycholinguistic Theories
- 5.5.4. Psychogenic Theories
- 5.5.5. Environmentalist Theories

5.6. Activities for learning the subject covers new trends
- 5.6.1. Introduction to Product Learning
- 5.6.2. Tradition vs. innovation
- 5.6.3. Mentoring in technology, computer science and training classrooms
- 5.6.4. Event-Based Learning
- 5.6.5. Design Thinking

5.7. Didactic resources in technology, computer science and vocational training
- 5.7.1. Didactic resources in technology, computer science and vocational training
- 5.7.2. Workshop/computer science classroom/machinery and equipment
- 5.7.3. Software and simulators

5.8. Teaching resources: programming, robotics and 3D printers. Emerging trends
- 5.8.1. Programming
- 5.8.2. Robotics
- 5.8.3. 3D Printing
- 5.8.4. Augmented Reality
- 5.8.5. QR Codes
- 5.8.6. Video games and simulators

5.9. Evaluation in technology, computer science and vocational training
- 5.9.1. Assess learning outcomes with active methodologies.
- 5.9.2. Standard evaluation, customized evaluation
- 5.9.3. Formative and summative evaluation/self-evaluation/co-evaluation-evaluation
- 5.9.4. Advantages of continuous assessment and acquisition of competencies
- 5.9.5. Evaluation of teaching with ICT
- 5.9.6. ICT evaluation indicators
- 5.9.7. Evaluation tools: e-portfolios and e-rubrics

5.10. Teachers in the Classroom: How to Create an Appropriate Place for Teaching-Learning?
- 5.10.1. Skills Development in the Classroom
- 5.10.2. Classroom Difficulties

Module 6. Teaching Innovation and Initiation to Educational Research

6.1. Educational Innovation as a Process and School Improvement
- 6.1.1. Education and the New Scenarios of the Global and Local Context
- 6.1.2. Key Concepts: Educational Innovation, Change, Reform and Educational Improvement
- 6.1.3. Educational Paradigms and Innovation Purposes
- 6.1.4. Why Innovate, the Meaning of Innovation
- 6.1.5. Process Models to Generate Educational Innovation
- 6.1.6. The Importance of a Strategic Approach to Incorporate Educational Innovations
- 6.1.7. Challenges of Educational Innovation: the Need for a Paradigm Shift and the Role of Research for Educational Improvement

6.2. Teaching Innovation: Perspectives, Challenges and Professional Learning
- 6.2.1. Areas of Innovation in the Educational Context
- 6.2.2. The Case of Learning Communities
- 6.2.3. The Obstacles and Challenges of Innovation in the Educational Context
- 6.2.4. How Do Teachers Learn? From Transmitting Teachers to Inquiring and Creative Teachers
- 6.2.5. Factors to Promote Learning and Professional Development
- 6.2.6. From Collective Learning to the Professional Development of the Teaching Staff
- 6.2.7. Spaces for Meeting and Professional Learning: Congresses, Innovation Conferences, Professional Networks, Communities of Practice and MOOCS

6.3. The Design of a Good Practice of Teaching Innovation
- 6.3.1. From Professional Learning to Good Teaching Practices
- 6.3.2. Good Practices and the Necessary Conceptual Change
- 6.3.3. Aspects to be Taken into Account in the Design of Good Teaching Practice
- 6.3.4. One More Step: Designing and Self-Evaluating Innovative Projects and Practices

6.4. Innovative Learning-Centered Designs to Promote Learner Ownership: Innovative Strategies and Practices
- 6.4.1. The Learner is the Protagonist of its Learning
- 6.4.2. Rationale for Selecting Learning-Centered Teaching Strategies: Situated Cognition
- 6.4.3. Rationale for Selecting Learning-Centered Teaching Strategies: The Learning Approach
- 6.4.4. Generalization and Transfer of Learning: Keys to Promote Learner Protagonism
- 6.4.5. Teaching Strategies to Encourage Students' Engagement with their Learning
- 6.4.6. Design of Innovative Practices Focused on Learning: Service-Learning

6.5. Innovative Use of Didactic Resources and Means
- 6.5.1. Paradigm Shift: From Solid Knowledge to Liquid Information
- 6.5.2. Metaphors on WEB 2.0 and their Educational Implications
- 6.5.3. New Literacies: Educational Visions and Consequences
- 6.5.4. Digital Literacy and the Development of Competencies
- 6.5.5. The Meaning and Practices of Digital Literacy in Schools
- 6.5.6. Literacy and Citizenship: More than ICT Integration
- 6.5.7. Good Practices in the Innovative Use of Technological Resources

6.6. Learning-Oriented Evaluation: Orientation and Design of Good Practices
- 6.6.1. Evaluation as a Learning Opportunity
- 6.6.2. Characteristics of Innovative Evaluation
- 6.6.3. The Dimensions of Evaluation: the Ethical and the Technical-Methodological Question
- 6.6.4. Innovative Evaluation: How to Plan the Evaluation to Orient it to Learning
- 6.6.5. Quality Criteria for Developing a Learning-Oriented Evaluation Process
- 6.6.6. How to Foster Improvement and Learning from Evaluation Results

6.7. Teacher Self-Assessment and Learning Improvement: The Challenge of Educational Innovation
- 6.7.1. Educational Improvement Makes it Essential to Self-Evaluate the Teaching Task
- 6.7.2. The Self-Evaluation of Teaching Practice as a Process of Reflection and Formative Accompaniment
- 6.7.3. Areas of Self-Evaluation of the Teaching Task
- 6.7.4. Self-Evaluation of Schools for the Improvement of their Educational Processes from an Inclusive Perspective.

6.8. New Technologies and Educational Research: Tools for Educational Improvement
- 6.8.1. Educational Research has its Own Character
- 6.8.2. The Research Process and the Educational Researcher's Viewpoint
- 6.8.3. Educational Research in the Current Context
- 6.8.4. Technological Tools for the Development of Educational Research
  - 6.8.4.1. Searching and Updating Information on the Internet
  - 6.8.4.2. Organizing Information
  - 6.8.4.3. Collection of Information in the Field Work
  - 6.8.4.4. Analysis of the Information: Quantitative and Qualitative
  - 6.8.4.5. Report Writing and Publication of Information

6.9. From Educational Research to Classroom Research: Improving the Teaching-Learning Process
- 6.9.1. Educational Research Functions
- 6.9.2. From Educational Research to Research in the Classroom
- 6.9.3. Classroom Research and Teachers' Professional Development
- 6.9.4. Ethical Considerations for the Development of Educational Research

6.10. Educational Challenges for the Research and Improvement of Teaching Practice of the Specialty
- 6.10.1. Educational Challenges for the 21st Century
- 6.10.2. Research, Innovation and Best Practices in the Specialty
- 6.10.3. Deontological Framework for Teaching Practice

Module 7. Educational Processes and Contexts

7.1. The White Paper and the 1970 Education Law
- 7.1.1. Introduction
- 7.1.2. White Paper
  - 7.1.2.1. What is a White Paper?
  - 7.1.2.2. White Paper. Educational in Spain: Bases for an Educational Policy
- 7.1.3. The General Education Law of 1970: Preamble and Goals
  - 7.1.3.1. Preamble
  - 7.1.3.2. Purposes
- 7.1.4. The General Law of Education of 1970: Educational Levels
  - 7.1.4.1. Preschool Education
  - 7.1.4.2. General Basic Education
  - 7.1.4.3. Baccalaureate
  - 7.1.4.4. University Education
  - 7.1.4.5. Professional Formation
- 7.1.5. The General Education Law of 1970: Schools and Teachers
  - 7.1.5.1. Educational Centers
  - 7.1.5.2. Professors

7.2. The LODE of 1985 and the LOGSE of 1990
- 7.2.1. Introduction
  - 7.2.4.1. Early Childhood Education
  - 7.2.4.2. Primary Education
  - 7.2.4.3. High School
  - 7.2.4.4. Baccalaureate
  - 7.2.4.5. Professional Training
  - 7.2.4.6. Special Education

7.3. The Organic Law on Education (LOE)
- 7.3.1. Introduction
- 7.3.2. Organic Law on Education (LOE):Principles

7.3.3. Organic Law on Education (LOE): Teaching
7.3.3.1. Early Childhood Education
7.3.3.2. Primary Education
7.3.3.3. Secondary Education
7.3.3.4. Baccalaureate
7.3.3.5. Professional Formation
7.3.4. Organic Law on Education (LOE): Itineraries
7.4. The Organic Law for the Improvement of the Quality of Education (LOMCE)
7.4.1. Introduction
7.4.2. LOMCE: Currículum
7.4.3. LOMCE: Secondary Education
7.4.4. LOMCE: Baccalaureate
7.4.5. LOMCE: Professional Training
7.4.5.1. Basic Vocational Training
7.4.5.2. Intermediate Vocational Training
7.4.5.3. Higher Vocational Training
7.4.5.4. Dual Vocational Training
7.4.6. LOMCE: Educational System Itineraries
7.4.7. LOMCE: Key Skills
7.5. The Organization of the Institutions
7.5.1. Concept of School
7.5.2. Components of the School Center
7.5.3. Characteristics of Educational Centers
7.5.3.1. Autonomy of the Centers
7.5.3.2. Functions of The School
7.6. Management and Leadership Applied to the Educational Institution: Management Team
7.6.1. Management of the Educational Institution
7.6.1. 1. Conceptions of the Term Management
7.6.2. Leadership.
7.6.2.1. Concept of Leader
7.6.2.2. Gestation of the Leader
7.6.2.3. The Authentic Leader
7.6.3. Leadership in Today's Organizations
7.6.3.1. Importance of Authentic Leadership
7.6.3.2. The Need for Authentic Leadership in Education
7.6.3.3. Types of Leadership
7.6.4. Leadership in the Management of Educational Institutions and Initiatives
7.6.4.1. Leadership of the Management Team
7.6.4.2. Pedagogical Leadership of the Director
7.6.4.3. Leadership of the Head of Studies
7.7. Management and Leadership Applied to the Educational Institution: Teaching Team
7.7.1. Teaching Team: Functions and Rights of the Teaching Staff
7.7.2. Teachers Organization
7.7.2.1. Teamwork
7.7.2.1.1. Working Groups
7.7.2.2. The Teacher as Tutor
7.7.2.2.1. The Profile of the Tutor
7.7.2.2.2. Duties of the Tutor
7.7.2.3. The Teacher-Coach
7.7.2.3.1. Conceptualization and Characteristics
7.7.2.3.2. The Coach
7.7.2.4. Networking
7.7.3. Leadership of the Teaching Staff
7.7.3.1. The Leadership of the Tutor
7.7.3.2. Teacher Leadership
7.8. The Guidelines of a School Center
7.8.1. School-Based Education Project
7.8.1.1. The Content of School-Based Education Project
7.8.1.2. Development of School-Based Education Project
7.8.1.3. Implementation of School-Based Education Project
7.8.1.4. Evaluation of School-Based Education Project
7.8.2. Internal Rules
7.8.2.1. The Content School-Based Education Project, a Discretionary Matter
7.8.3. Specific Plans
7.8.3.1. Purpose, Typology and Content
7.8.3.2. Another Way of Expressing the School-Based Education Project

7.8.4. Annual Report
7.8.4.1. Guidelines for the Preparation of an Educational Center's Annual Report
7.8.5. Autonomy as a Requirement
7.9. The Organizational Structure of a Center and Communication Instruments
7.9.1. Collegiate Bodies
7.9.1.1. The School Council
7.9.1.1.1. Composition
7.9.1.1.2. Election and Renewal of the School Board
7.9.1.1.3. Competencies
7.9.1.2. The Teaching Staff
7.9.2. Educational Coordination Bodies
7.9.2.1. Teaching Departments
7.9.2.2. Guidance Department in Compulsory Secondary Education
7.9.2.3. Complementary and Extracurricular Activities Department
7.9.2.4. Pedagogical Coordination Commission
7.10. Curriculum Management
7.10.1. The School Space: the Organization of the Classroom
7.10.2. Assessment of the Spatial Design of the Classroom
7.10.2.1. Systematic Observation of Users in the Course of Using the Space
7.10.2.2. Self-Application and Evaluation
7.10.3. The School Space as a Dynamic Creation of the Teacher
7.10.4. School Time
7.10.5. Student Organization
7.10.5.1. Vertical Organization of the Student Body
7.10.5.1.1. Graduate School
7.10.5.1.2. The Ungraded School
7.10.5.1.3. The Multigrade School
7.10.5.2. Horizontal Organization of the Student Body
7.10.5.2.1. The Autonomous Class
7.10.5.2.2. Departmentalization
7.10.5.2.3. Team Teaching by Teachers
7.11. Change and Innovation in the School
7.11.1. Improvement in Education
7.11.1.1. From Change as a Necessity to Change as an Opportunity
7.11.1.2. Global Versus Partial Change
7.11.1.3. Organizational Versus Social Change
7.11.1.4. Towards Successful Change
7.11.2. Institutional Innovation
7.11.3. The Creation and Management of Collective Knowledge
7.11.3.1. Departments and Educational Teams as Structures for Innovation
7.11.3.2. Strategies for Intervention in Collaborative Contexts
7.11.4. Teachers and Managers as Agents of Change
7.12. Change and Innovation in the School Center: Spatial Context and Didactic Project
7.12.1. The Planning Process for the Improvement of the Spatial Context of Learning
7.12.2. The Imperatives for Change and the School in its Environment
7.12.3. The Traditional Model
7.12.4. Spatial Context and Didactic Project
7.12.5. Infrastructure of the New Learning Contexts
7.12.6. Strategies for the Improvement of the Quality of Life in the School Center
7.12.6.1. Search for Correspondence between the Designs of the Building and the Furniture
7.12.6.2. Development of a New Conception of the Workplace

of the Student
7.12.6.3. Redistribution of the Work Areas by Means of the Furniture
7.12.6.4. The Participation of Students in the Appropriation of Space
7.12.6.5. The Urban Planning Dimension

Module 8. Inclusive Education and Attention to Diversity

8.1. Concept of Inclusive Education and its Key Elements
- 8.1.1. Conceptual Approach
- 8.1.2. Difference Between Integration and Inclusion
  - 8.1.2.1. Integration Concept
  - 8.1.2.2. Inclusion Concept
  - 8.1.2.3. Difference Between Integration and Inclusion
- 8.1.3. Key Elements of Educational Inclusion
  - 8.1.3.1. Key Strategic Aspects
- 8.1.4. The Inclusive School and the Education System
  - 8.1.4.1. The Challenges of the Education System

8.2. Inclusive Education and Attention to Diversity
- 8.2.1. Concept of Attention to Diversity
  - 8.2.1.1. Types of Diversity
- 8.2.2. Diversity and Educational Inclusion Measures
  - 8.2.2.1. Methodological guidelines

8.3. Multilevel Teaching and Cooperative Learning
- 8.3.1. Key Concepts
  - 8.3.1.1. Multilevel Teaching
  - 8.3.1.2. Cooperative Learning
- 8.3.2. Cooperative Teams
  - 8.3.2.1. Conceptualization of Cooperative Teams
  - 8.3.2.2. Functions and Principles
  - 8.3.2.3. Essential Elements and Advantages
- 8.3.3. Benefits of Multilevel Teaching and Cooperative Learning
  - 8.3.3.1. Benefits of Multilevel Teaching
  - 8.3.3.2. Benefits of Cooperative Learning
- 8.3.4. Barriers to the Implementation of Inclusive Schools
  - 8.3.4.1. Political Barriers
  - 8.3.4.2. Cultural Barriers
  - 8.3.4.3. Didactic Barriers
  - 8.3.4.4. Strategies to Overcome Barriers

8.4. Social Inclusion
- 8.4.1. Inclusion and Social Integration
  - 8.4.1.1. Definition of Integration and Elements
  - 8.4.1.2. Concept of Social Inclusion
  - 8.4.1.3. Inclusion vs. Integration
- 8.4.2. Inclusion in Education
  - 8.4.2.1. Social Inclusion at School

8.5. Inclusive School Assessment
- 8.5.1. Assessment Parameters

8.6. ICT and UDL in Inclusive Schools
- 8.6.1. Traditional Teaching Methods
- 8.6.2. ICT
  - 8.6.2.1. Concept and Definition of ICT
  - 8.6.2.2. Characteristics of ICT
  - 8.6.2.3. Telematics Applications and Resources
  - 8.6.2.4. ICT in the Inclusive School
- 8.6.3. Universal Design for Learning
  - 8.6.3.1. What is DUA?
  - 8.6.3.2. UDL Principles
  - 8.6.3.3. The Application of the UDL to the Curriculum
  - 8.6.3.4. Digital Resources and UDL
- 8.6.4. Digital Media to Individualize Classroom Learning

Module 9. Creativity and Emotional Education in the Classroom

9.1. Emotional Intelligence and the Education of Emotions according to the Mayer and Salovey Model

9.2. Other Models of Emotional Intelligence and Emotional Transformation
- 9.2.1. Emotional Competence Models
- 9.2.2. Social Competence Models
- 9.2.3. Multiple Models

9.3. Socio-Emotional Skills and Creativity According to Level of Intelligence

9.4. Concept of Emotional Quotient, Intelligence and Dyssynchrony Accommodation in High Intellectual Capacities

9.5. Concept of Hyperemotivity
9.6. Current Scientific Studies on Creativity, Emotions, Self-Awareness and Intelligence
  9.6.1. Neuroscientific Studies
  9.6.2. Applied Studies
9.7. Practical Classroom Resources to Prevent Demotivation and Hyperemotivity
9.8. Standardized Tests to Assess Emotions and Creativity
  9.8.1. Creativity Tests and Quizzes
  9.8.2. Assessing Emotions
  9.8.3. Laboratories and Valuation Experiences
9.9. Inclusive Schools: Humanist Model and Emotional Education Interrelation

Module 10. Neuroeducation

10.1. Introduction to Neuroeducation.
10.2. Main Neuromyths.
10.3. Attention
10.4. Emotion
10.5. Motivation
10.6. The Learning Process.
10.7. Memory
10.8. Stimulation and Early Interventions.
10.9. Importance of Creativity in Neuroeducation.
10.10. Methodologies that allow the Transformation of Education in Neuroeducation

Module 11. Communication in the Classroom

11.1. Learning to Teach
  11.1.1. Communication Processes
  11.1.2. Teaching Transmission Processes
11.2. Oral Communication
  11.2.1. Voice in the Classroom
  11.2.2. Voice Care in the Classroom
11.3. Communication Support Systems
  11.3.1. The Use of the Blackboard
  11.3.2. The Use of Projectors
11.4. The Use of Images in Teaching
  11.4.1. Images and Licenses for Use
  11.4.2. Author Images
11.5. The Use of Video in Teaching
  11.5.1. Video as a Support Material
  11.5.2. Teaching through Videos
11.6. Written Communication
  11.6.1. The Reports and Written Assignments
  11.6.2. Blogs and Forums
11.7. Communication Difficulties
  11.7.1. Teaching Difficulties
  11.7.2. Classroom Difficulties
11.8. Collaborative Processes vs. Competition
  11.8.1. Advantages and Disadvantages of Collaborative Learning
  11.8.2. Advantages and Disadvantages of Competency-Based Learning
11.9. Development of Support Materials
  11.9.1. Classroom Supplies
  11.9.2. Consultation Material
11.10. Development of Network Teaching
  11.10.1. Teaching Resources on the Internet
  11.10.2. Wikis and Reference Material on the Internet

06

Methodology

This training program offers a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

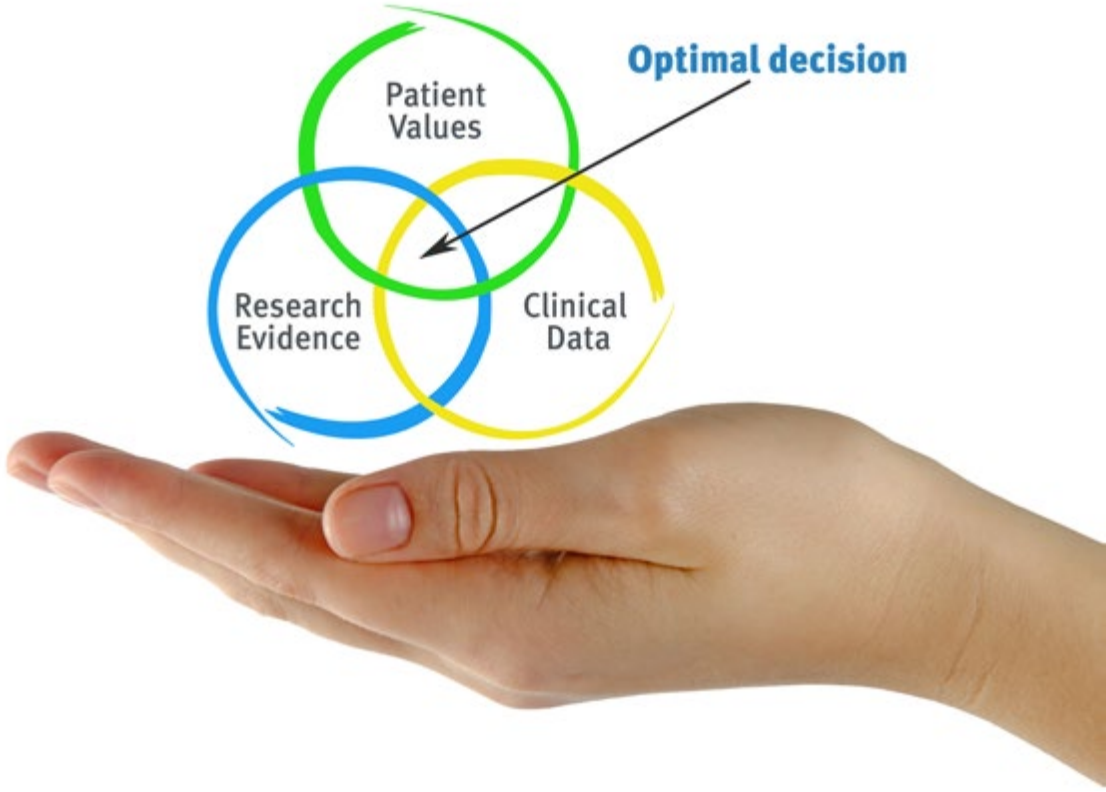
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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 Global University 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:

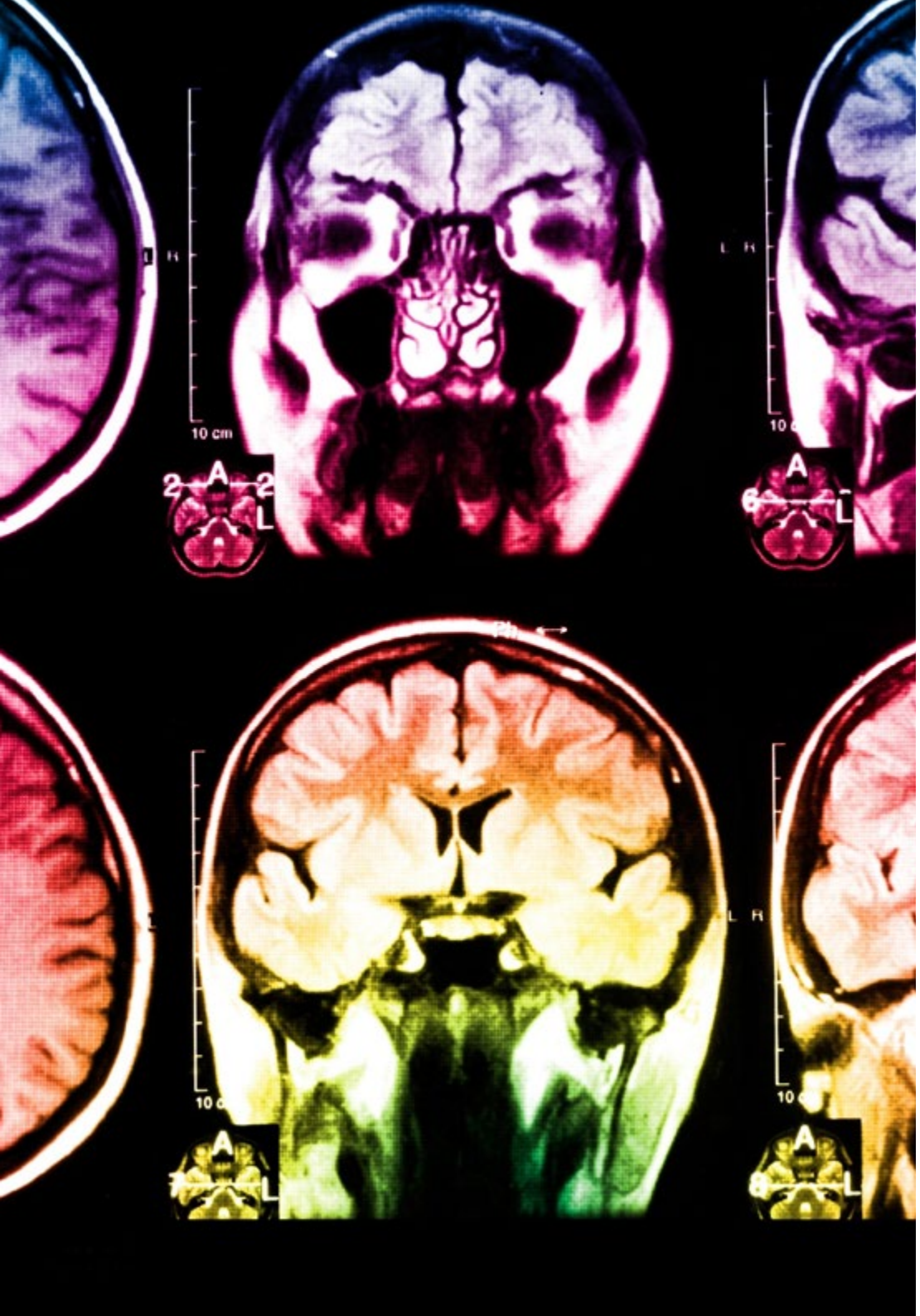
1. Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
3.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

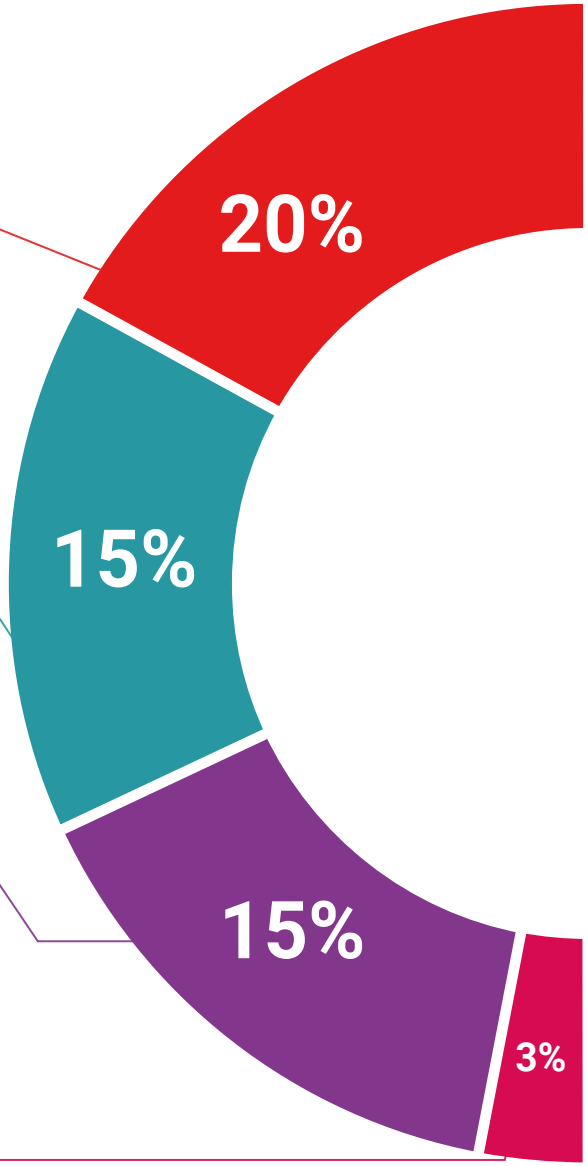
Interactive Summaries

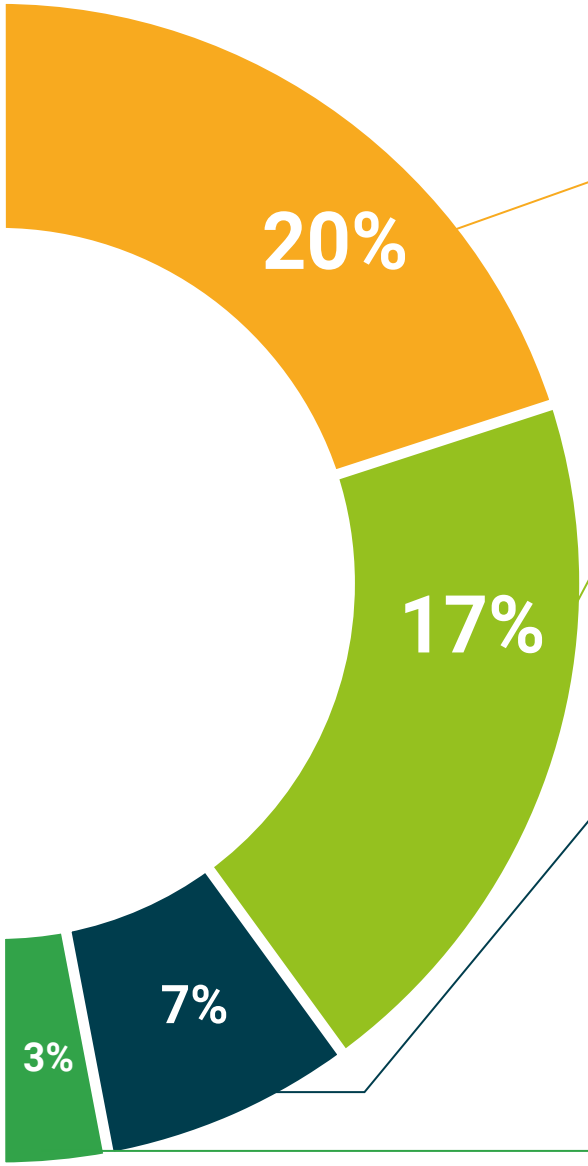
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 in Technology and Computer Science Teacher Training in High School Education guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree diploma issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This program will allow you to obtain your **Professional Master's Degree diploma in Technology and Computer Science Teacher Training in High School Education** 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 Technology and Computer Science Teacher Training in High School Education**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**

tech global university

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

Professional Master's Degree in Technology and Computer Science Teacher Training in High School Education

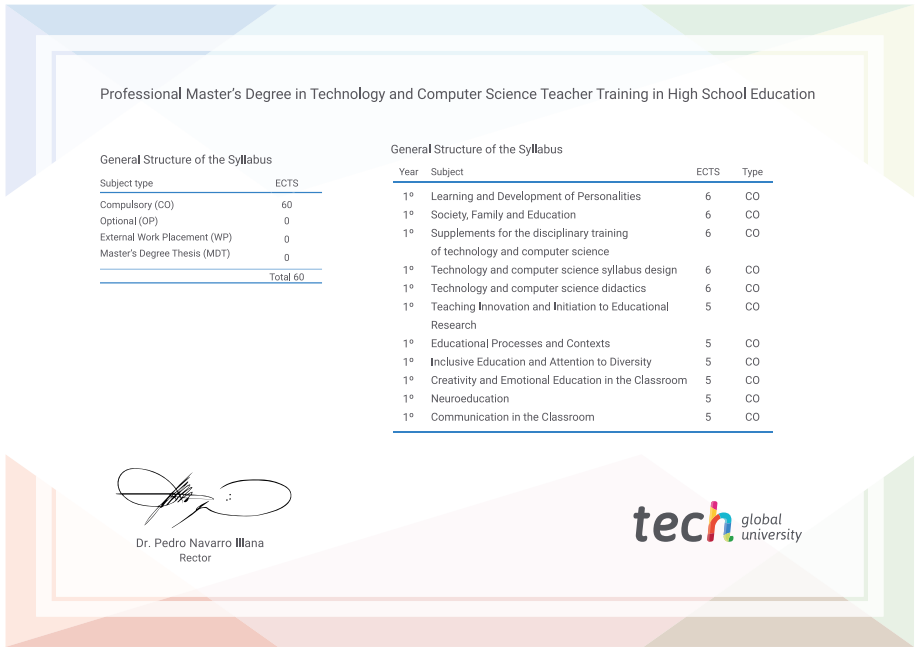
This is a program of 1,500 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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
Rector

Unique TECH Code: AFWORD23S techtitute.com/certificates


Professional Master's Degree in Technology and Computer Science Teacher Training in High School Education

General Structure of the Syllabus

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 60

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Learning and Development of Personalities	6	CO
1º	Society, Family and Education	6	CO
1º	Supplements for the disciplinary training of technology and computer science	6	CO
1º	Technology and computer science syllabus design	6	CO
1º	Technology and computer science didactics	6	CO
1º	Teaching Innovation and Initiation to Educational Research	5	CO
1º	Educational Processes and Contexts	5	CO
1º	Inclusive Education and Attention to Diversity	5	CO
1º	Creativity and Emotional Education in the Classroom	5	CO
1º	Neuroeducation	5	CO
1º	Communication in the Classroom	5	CO

Dr. Pedro Navarro Illana
Rector

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*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.

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Professional Master's Degree

Technology and Computer Science Teacher Training in High School Education

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

Professional Master's Degree

Technology and Computer Science Teacher Training in High School Education

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