Postgraduate Diploma
Speech Therapy Neurorehabilitation and Early Intervention

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Postgraduate Diploma

Speech Therapy Neurorehabilitation and Early Intervention

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Accreditation: **23 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-speech-therapy-neurorehabilitation-early-intervention

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01

Introduction

Diseases such as Stroke or Traumatic Brain Injury cause a significant reduction in an individual's communicative abilities, which negatively impacts their quality of life and that of their loved ones. In response to this, updated tools in Speech Therapy Neurorehabilitation have emerged, enabling improved comprehension and expression, as well as written and reading skills. Given their positive impact on both the patient and their family, specialists need to be aware of these advances to optimize their professional development. For this reason, this institution has created this qualification. Through it, you will learn modern techniques to recover speech or strategies to enhance message perception. All of this is available online, allowing you to balance your professional and personal commitments.

Assimilate, with this qualification, the most up-to-date and effective techniques to recover speech and enhance message comprehension in individuals who have suffered a stroke"

Speech Therapy Neurorehabilitation has become, in recent years, an excellent ally for recovering communication skills in individuals who have suffered acquired brain damage of various kinds. Its growing popularity has led to significant advancements in the exercises and techniques used in this field, providing major benefits in helping individuals regain their ability to speak, comprehend messages, or recover swallowing function. As a result, specialists interested in staying up-to-date with advancements in their field are required to identify these cutting-edge procedures.

For this reason, TECH has designed this academic program, which will equip students with the most recent and relevant aspects related to Speech Therapy Neurorehabilitation and Early Intervention. Throughout this academic period, students will establish updated strategies for conducting neuropsychological assessments of patients and will learn the latest techniques to support language and memory recovery. Additionally, the program will explore the benefits of occupational therapy in regaining various functions in individuals who have suffered a stroke.

Since this Postgraduate Diploma is delivered entirely online, students will gain exceptional learning without the need for inconvenient daily commutes to study centers. The program also includes didactic content in formats such as explanatory videos, readings, and self-assessment tests. In this way, students will benefit from effective learning, available 24/7, tailored to their academic and personal requirements.

This **Postgraduate Diploma in Speech Therapy Neurorehabilitation and Early Intervention** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical case studies presented by experts in Speech Therapy Neurorehabilitation, Orofacial Therapy, and Analysis of Vital Functions
- The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

This qualification will enable you to learn the most sophisticated strategies for neuropsychological patient evaluation, with the goal of rigorously assessing the extent of Acquired Brain Injury"

Study from anywhere in the world, at your own pace, thanks to the fully online delivery of this Postgraduate Diploma"

With this qualification, you will handle the latest evidence regarding the benefits of occupational therapy in recovering various vital functions in individuals who have suffered a stroke.

This Postgraduate Diploma offers you the opportunity to choose the didactic formats that best suit your academic needs, optimizing your learning experience.

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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts.

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Objectives

The Postgraduate Diploma in Speech Therapy Neurorehabilitation and Early Intervention has been designed with the goal of providing specialists with an update on their knowledge in this field. This way, they will renew their understanding of the relationship between neurorehabilitation and speech therapy treatment or establish recent techniques to support feeding in complex young patients. This learning will be guaranteed through the achievement of the following general and specific objectives.

Get the update in Speech Therapy Neurorehabilitation and Early Intervention that you have been looking for through this qualification"

General Objectives

- Develop comprehensive knowledge of the anatomical and functional bases of the central and peripheral nervous systems
- Study the anatomy and function of organs involved in basic functions such as respiration, phonation, and swallowing
- Acquire knowledge in both evaluation and speech therapy intervention
- Delve into rehabilitation techniques validated in clinical practice
- Develop intervention skills gained from complementary disciplines such as neuropsychology, physiotherapy, and psychology
- Become proficient in the assessment, diagnosis, and treatment of neurofunctional and speech therapy disorders in specific groups with neurodevelopmental or syndromic alterations
- Learn about various approaches and intervention programs in Speech Therapy Neurorehabilitation

Enroll in this update program and gain the necessary knowledge to become a reference professional in the field of Speech Therapy Neurorehabilitation"

Specific Objectives

Module 1. Introduction to Neurorehabilitation I: Fundamentals of Neuroanatomy

- Learn about the historical study of the brain and its exploration since ancient times
- Study the fundamentals of the nervous system to understand brain function
- Detail, in general terms, the embryological development stages of the nervous system
- Classify the different structures that make up the central nervous system
- Explore the structural and functional organization of the cerebral cortex
- Identify the general characteristics of the ascending and descending pathways of the spinal cord
- Recognize differences between pediatric and adult populations in clinical practice
- Study the various functions of the autonomic nervous system
- Understand the characteristics underlying motor control

Module 2. Introduction to Neurorehabilitation II: Relation to Speech Therapy Treatment

- Learn about the different diseases causing brain damage as a basis for neuropsychological assessment
- Identify the basic cognitive functions
- Conceptualize attention, memory, and perception functions
- Acquire basic knowledge of tests used for cognitive evaluation
- Detect the main alterations in the functions studied in this module
- Introduce Executive Functions and Language concepts
- Understand what neuropsychological rehabilitation consists of and how to address each cognitive function
- Delve into different Behavior Modification Techniques (BMT)
- Gain basic knowledge on how to apply BMT
- Acquire tools to intervene in cases of behavioral alteration
- Learn to apply BMT in speech therapy to achieve better outcomes
- Understand the clinical relevance of occupational therapy in speech rehabilitation
- Define the role of families during the rehabilitation process

Module 3. Orofacial/Myofunctional Therapy (OMT) and Early Intervention

- Learn about innate and acquired orofacial behavior in infants
- Recognize correct motor patterns in swallowing, breathing, and sucking
- Detect functional feeding alterations early
- Understand the importance of orofacial growth and the development of vegetative functions in pediatrics
- Identify signs of proper positioning and apply them in various breastfeeding postures
- Learn to use alternative techniques for infant feeding
- Deepen the management of different orofacial intervention strategies in pediatric patients with swallowing disorders
- Develop actionable feeding plans that can provide early and highly successful intervention
- Create individualized feeding programs adapted to each case with preventive, re-educational, and rehabilitative purposes

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Course Management

With the goal of providing students with a top-tier educational program, TECH has selected a group of outstanding specialists in Speech Therapy Neurorehabilitation to be responsible for delivering this qualification. Since these professionals are directly involved in the creation of the teaching materials available in this Postgraduate Diploma, the specialist will gain a set of fully applicable skills for their daily healthcare practice.

This Postgraduate Diploma is directed and taught by leading active experts in the field of Speech Therapy Neurorehabilitation, ensuring you receive the most up-to-date knowledge in this area"

Management

Dr. Borrás Sanchís, Salvador

- Psychologist, Teacher and Speech Therapist
- Educational Counselor in the Valencian Government, Department of Education
- Specialist in Abile Educativa
- Partner at Avance SL
- Pedagogical Advisor and External Collaborator at Aula Salud
- Pedagogical Director at iteNlearning
- Author of *Guide for the Reeducation of Atypical Swallowing and Associated Disorders*
- Pedagogical Director at the Instituto DEIAP (Institute for Comprehensive Development and Psychoeducational Care)
- Bachelor's Degree in Psychology
- Hearing and Speech Teacher
- Certified in Speech Therapy

Ms. Santacruz García, Estefanía

- Social integrator and clinical speech therapist at Uner La Clinic.
- Teacher at CEFIRE
- Specialist in Orofacial and Myofunctional Therapy

Teachers

Ms. Gallego Díaz, Mireia

- Hospital Speech Therapist
- Occupational Therapist
- Speech Therapist Expert in Swallowing Disorders
- Degree in Speech Therapy
- Master's Degree in Speech Therapy Neurorehabilitation in Acquired Brain Injury

Ms. García Gómez, Andrea MARÍA

- Speech therapist specialized in Acquired Brain Injury Neurorehabilitation
- Speech Therapist at UNER Clinic
- Speech Therapist at Integra Brain Injury
- Speech Therapist at Ineuro

Ms. Álvarez Valdés, Paula del Carmen

- Specialist in Diagnosis and Treatment of Early Childhood Care
- Clinical Speech Therapist Specialist in Myofunctional Therapy
- Expert in Psychodiagnosis and Early Intervention Treatment
- Direct collaboration in Dental Office
- Degree in Speech Therapy
- Master's Degree in Special Education and in Foreign Languages from the Pontifical University of Salamanca
- ISEP Master's Degree in Myofunctional Therapy

Dr. Carrasco de Larriva, Concha

- Cognitive Rehabilitation and Clinical Neuropsychology Expert
- Psychologist at PEROCA
- Clinical Neuropsychologist accredited by the General Council of Psychology in Spain
- Assistant Professor of the Department of Psychology at the Catholic University San Antonio of Murcia
- Master's Degree in Clinical Neuropsychology from the Spanish Association of Clinical Cognitive Behavioral Psychology
- Expert in Child and Cognitive Rehabilitation by the Francisco de Vitoria University
- Postgraduate degree in Cognitive Rehabilitation from ISEP
- Qualified for the assessment of Autism with the Autism Diagnostic Observation Scale ADOS.

Ms. Santacruz García, Raquel

- Specialist in Pedagogy and Nutrition
- Dietician for the Hispanic Ballet Company
- Dancer at the Andalusian Dance Center
- Graduate in Human Nutrition and Dietetics from the Catholic University San Antonio
- Specialist in Dance Pedagogy by the Theatre Institute of Barcelona
- Intermediate Degree in Classical Dance at the Conservatory of Murcia

Mr. Santacruz García, José Luis

- Psychologist specializing in Congenital and Acquired Brain Injury

Ms. Jiménez Jiménez, Ana

- Clinical Neuropsychologist and Social Worker
- Clinical Neuropsychologist at Integra Cerebral Damage
- Neuropsychologist at UNER Clinic
- Educator on the Social Action Team Murcia in Cáritas Española
- Degree in Social Work at the University of Murcia
- Degree in Psychology from the National University of Distance Education (UNED)
- Master's Degree in Clinical Neuropsychology from the European University Miguel de Cervantes
- Master's Degree in General Health Psychology from the National University of Distance Education (UNED)

Ms. López Samper, Belén

- General Health Psychologist and Clinical Neuropsychologist
- Psychologist at the Alcaraz Institute
- Psychologist at the IDEAT Centre
- Neuropsychologist at the UNER Clinic-Comprehensive Brain Damage Assessment and Rehabilitation
- Specialized in Child and Adult Neurorehabilitation at the Integral Center for Brain Injury
- Master's Degree in Special Educational Needs and Early Care, Developmental and Child Psychology from the International University of Valencia
- Master's Degree in Clinical Neuropsychology by the Spanish Association of Clinical Cognitive Behavioral Psychology
- Master's Degree in General Health Psychology from the University of Valencia
- Degree in Psychology from the Miguel Hernández University of Elche

Ms. Martín Bielsa, Laura

- Director of Multidisciplinary Center Dime Más
- CFP Estill Voice Training
- Bachelor's Degree in Speech Therapy
- Diploma in Teaching
- Dean of the Professional Association of Speech Therapists of Aragon

Ms. Muñoz Boje, Rocío

- Occupational Therapist Specialist in Neurorehabilitation in the Uner Clinic
- Degree in Occupational Therapy

Ms. Navarro Maruenda, Laura

- Neuropsychologist at the Kinemas Center
- Specialist in Child and Adult Neurorehabilitation in Integral Center of Brain Injury
- Master's Degree in Speech Neurorehabilitation and Vital Function Analysis
- Neuropsychologist at INEURO
- Neuropsychologist at Uner La Clinic
- Bachelor's Degree in Psychology from the Miguel Hernández University of Elche
- Master's Degree in Health Psychology from the Miguel Hernández University of Elche
- Master's Degree in Clinical Neuropsychology from the European University Miguel de Cervantes
- Master's Degree in Pediatric Neurology and Neurodevelopment by CEU Cardena Herrera University

Ms. Sanz Pérez, Nekane

- Clinical Speech Therapist specialized in Acquired Brain Injury
- Teacher in Iberocardio for Aspace (Main Confederation and Entity for Cerebral Palsy Care in Spain)

Ms. Selva Cabañero, Pilar

- Obstetric-Gynecological Nurse Specialist (Midwife)
- Obstetrical- Gynecological Nursing Teaching Unit of the University of Murcia at the General University Hospital Santa Lucía in Murcia.
- Publication, Ankyloglossia and the Success of Breastfeeding, ISBN13: 978- 84- 695- 5302- 2. 2012

A unique, essential and decisive specialization experience to boost your professional development"

04

Structure and Content

The syllabus of this qualification is composed of 3 modules, through which the specialist will enhance and update their knowledge in Speech Therapy Neurorehabilitation and Early Intervention. All the teaching materials provided throughout the duration of this program are available in formats such as supplementary readings, explanatory videos, or interactive summaries. As a result, and through an online methodology, students will acquire a practical and engaging learning experience.

This syllabus, designed and developed by high-level experts in Speech Therapy Neurorehabilitation, will provide you with the most cutting-edge educational content in this discipline"

Module 1. Introduction to Neurorehabilitation I: Fundamentals of Neuroanatomy

1.1. History of Brain Discovery
- 1.1.1. Introduction
- 1.1.2. Stages in Brain History: Mind vs. Brain
  - 1.1.2.1. From Antiquity to the 2nd Century
  - 1.1.2.2. From the 2nd to the 17th Century
  - 1.1.2.3. From the 19th Century to the Present
- 1.1.3. A Modern Vision of the Brain
- 1.1.4. Neuropsychological Rehabilitation
- 1.1.5. Conclusions
- 1.1.6. Bibliography

1.2. Introduction to the Nervous System
- 1.2.1. Introduction
- 1.2.2. Neurons
  - 1.2.2.1. Cell Anatomy
  - 1.2.2.2. Cell Functions
  - 1.2.2.3. Classification of Neurons
  - 1.2.2.4. Support Cells or Glia
- 1.2.3. Transmitting Information
  - 1.2.3.1. Action Potentials
  - 1.2.3.1.1. Resting Potential
  - 1.2.3.1.2. Action Potential
  - 1.2.3.1.3. Postsynaptic Potential, Local or Graded
- 1.2.4. Neuronal Circuits
- 1.2.5. Hierarchical Neural Organization
  - 1.2.5.1. Introduction
  - 1.2.5.2. Characteristics
- 1.2.6. Brain Plasticity
- 1.2.7. Conclusions

1.3. Neurodevelopment
- 1.3.1. Introduction
- 1.3.2. Phases in Brain Development
  - 1.3.2.1. Neurogenesis: Proliferation
  - 1.3.2.2. Cell Migration
  - 1.3.2.3. Cell Differentiation
  - 1.3.2.4. Synaptogenesis
  - 1.3.2.5. Apoptosis: Neuronal Death
  - 1.3.2.6. Myelination
- 1.3.3. Brain Maturation from Birth to Adolescence
- 1.3.4. Actuation Systems in Newborns: Reflexes
- 1.3.5. Warning Signs
- 1.3.6. Conclusions
- 1.3.7. Bibliography

1.4. Central Nervous System
- 1.4.1. Introduction
- 1.4.2. Peripheral Nervous System
- 1.4.3. Central Nervous System
  - 1.4.3.1. CNS Protection System: Meninges
  - 1.4.3.2. Irrigation of the CNS
  - 1.4.3.3. Spinal Cord
  - 1.4.3.4. Brain
    - 1.4.3.4.1. Introduction
    - 1.4.3.4.2. Structure
      - 1.4.3.4.2.1. Brain Stem
      - 1.4.3.4.2.2. Rhombencephalon or Hindbrain
      - 1.4.3.4.2.3. Mesencephalon or Midbrain
      - 1.4.3.4.2.4. Prosencephalon or Forebrain
- 1.4.4. Conclusions
- 1.4.5. Bibliography

1.5. Structural and Functional Organization of the Cerebral Cortex
- 1.5.1. Introduction
- 1.5.2. Brodmann Map
- 1.5.3. Brain Hemispheres and Cerebral Cortex: Structural Organization
  - 1.5.3.1. Circumvolutions and Main Sulci: Cerebral Lobes
  - 1.5.3.2. Structure of the Cerebral Cortex
  - 1.5.3.3. White Matter
    - 1.5.3.3.1. Association Fibers
    - 1.5.3.3.2. Commissural Fibers
    - 1.5.3.3.3. Projection Fibers
- 1.5.4. Cortical Areas: Functional Organization
- 1.5.5. Conclusions
- 1.5.6. Bibliography

1.6. Spinal Cord Pathways
- 1.6.1. Spinal Cord
- 1.6.2. Ascending Cord Pathways
- 1.6.3. Anatomical Organization
- 1.6.4. Functions and Lesions of the Ascending Pathways
- 1.6.5. Descending Cord Pathways
- 1.6.6. Anatomical Organization
- 1.6.7. Descending Tract Functions
- 1.6.8. Descending Tract Lesions
- 1.6.9. Sensory Receptors
- 1.6.10 Anatomical Types of Receptors

1.7. Cranial Nerves
- 1.7.1. Essential Basic Vocabulary
- 1.7.2. History
- 1.7.3. Introduction
- 1.7.4. Nerve Components
- 1.7.5. Classification of Cranial Nerves
- 1.7.6. Pathologies
- 1.7.7. Summary

1.8. Spinal Nerves
- 1.8.1. Introduction
- 1.8.2. Components
- 1.8.3. Dermatomes
- 1.8.4. Plexus
- 1.8.5. Cervical Plexus
- 1.8.6. Brachial Plexus
- 1.8.7. Lumbar Plexus
- 1.8.8. Sacral Plexus
- 1.8.9. Pathologies

1.9. Autonomic Nervous System
- 1.9.1. Basic Vocabulary
- 1.9.2. General Overview
- 1.9.3. ANS Functions
- 1.9.4. Somatic Nervous System vs. Autonomous Nervous System
- 1.9.5. Organization
- 1.9.6. Sympathetic ANS
- 1.9.7. Parasympathetic ANS
- 1.9.8. Enteric Nervous System
- 1.9.9. ANS Disorders

1.10. Motor Control
- 1.10.1. Somatosensory System
- 1.10.2. Upper Motor Circuit
- 1.10.3. Movement
- 1.10.4. Introduction to Motor Control
- 1.10.5. Clinical Applications of Motor Control and Learning in Neurorehabilitation
- 1.10.6. Neurological Impairment
- 1.10.7. Global Summary

Module 2. Introduction to Neurorehabilitation II: Relation to Speech Therapy Treatment

2.1. Etiology of Brain Damage
- 2.1.1. Introduction
- 2.1.2. Vascular Disorders
  - 2.1.2.1. Occlusive Syndromes
  - 2.1.2.2. Types of Cerebrovascular Disease
  - 2.1.2.3. Neuropsychological Disorders in CVA
- 2.1.3. Intracranial Neoplasms
  - 2.1.3.1. General Characteristics
  - 2.1.3.2. Tumor Classification
  - 2.1.3.3. Neuropsychological Disorders in Tumors
- 2.1.4. Cranioencephalic Trauma (CET)
  - 2.1.4.1. General Characteristics
  - 2.1.4.2. Types of CET
  - 2.1.4.3. CET Disorders
- 2.1.5. Neurodegenerative Diseases
  - 2.1.5.1. General Characteristics
  - 2.1.5.2. Types and Disorders
- 2.1.6. Epilepsy
  - 2.1.6.1. General Characteristics
  - 2.1.6.2. Classification
- 2.1.7. Central Nervous System Infections
  - 2.1.7.1. General Characteristics
  - 2.1.7.2. Classification
- 2.1.8. Cerebrospinal Fluid Circulation and Disorders
  - 2.1.8.1. General Characteristics
  - 2.1.8.2. Disorders
- 2.1.9. Global Summary

2.2. Cognitive Functions I: Attention, Perception and Memory
- 2.2.1. Introduction to Cognitive Functions
- 2.2.2. Alertness System
  - 2.2.2.1. Concept
  - 2.2.2.2. Evaluation
  - 2.2.2.3. Abnormalities
- 2.2.3. Attention
  - 2.2.3.1. Focused/Selective Attention
    - 2.2.3.1.1. Concept
    - 2.2.3.1.2. Evaluation
    - 2.2.3.1.3. Abnormalities
  - 2.2.3.2. Sustained Attention
    - 2.2.3.2.1. Concept
    - 2.2.3.2.2. Evaluation
    - 2.2.3.2.3. Abnormalities
  - 2.2.3.3. Alternating Attention
    - 2.2.3.3.1. Concept
    - 2.2.3.3.2. Evaluation
    - 2.2.3.3.3. Abnormalities
  - 2.2.3.4. Divided Attention
    - 2.2.3.4.1. Concept
    - 2.2.3.4.2. Evaluation
    - 2.2.3.4.3. Abnormalities
- 2.2.4. Memory
  - 2.2.4.1. Concept
  - 2.2.4.2. Process
  - 2.2.4.3. Classification
  - 2.2.4.4. Evaluation
  - 2.2.4.5. Abnormalities
- 2.2.5. Perception
  - 2.2.5.1. Concept
  - 2.2.5.2. Evaluation
  - 2.2.5.3. Abnormalities

2.3. Cognitive Functions II: Language and Executive Functions
- 2.3.1. Conceptualization of Executive Functions
- 2.3.2. Executive Functions Assessment
- 2.3.3. Executive Function Disorders
- 2.3.4. Dorsolateral Prefrontal Syndrome
- 2.3.5. Orbitofrontal Syndrome
- 2.3.6. Mesial Frontal Syndrome
- 2.3.7. Conceptualization of Language
- 2.3.8. Language Assessment
- 2.3.9. Language Impairment

2.4. Neuropsychological Assessment
- 2.4.1. Introduction
- 2.4.2. Neuropsychological Assessment Objectives
- 2.4.3. Assessment Variables
- 2.4.4. Diffuse vs. Local Brain Injury
- 2.4.5. Injury Location and Size
- 2.4.6. Injury Depth
- 2.4.7. Distant Effects of the Injury
- 2.4.8. Disconnection Syndrome
- 2.4.9. Distant Effects of the Injury
- 2.4.10 Intrinsic Patient-Related Variables
- 2.4.11 Quantitative vs. Qualitative Assessment
- 2.4.12 Stages in Neuropsychological Assessment
- 2.4.13. Clinical History and Establishing Therapeutic Relationships
- 2.4.14. Test Administration and Correction
- 2.4.15. Analyzing and Interpreting Results, Preparing Reports and Returning Information

2.5. Neuropsychological Rehabilitation and Speech Therapy Applications
- 2.5.1. Neuropsychological Rehabilitation I: Cognitive Functions
  - 2.5.1.1. Introduction
- 2.5.2. Attention and Perception
  - 2.5.2.1. Training Attention Processes
  - 2.5.2.2. Effectiveness
  - 2.5.2.3. Virtual Reality

2.5.3. Memory
2.5.3.1. Basic Principles
2.5.3.2. Memory Strategies
2.5.3.3. Virtual Reality
2.5.4. Praxias
2.5.4.1. Stimulation Strategies
2.5.4.2. Specific Tasks
2.5.5. Language
2.5.5.1. General Advice
2.5.5.2. Specific Tasks
2.5.6. Executive Functions (EF)
2.5.6.1. General Advice
2.5.6.2. EF Stimulation
2.5.6.2.1. Sohlberg and Mateer
2.5.6.2.2. Executive Deficit Treatment Techniques
2.5.6.3. Specific Tasks
2.5.6.4. Effectiveness
2.5.7. Summary
2.5.8. Bibliography
2.6. Behavioral Rehabilitation and Its Application in Speech Therapy
2.6.1. Introduction
2.6.1.1. ERC Reference Model
2.6.1.2. Orientations/Currents
2.6.1.3. Behavior Modification Characteristics
2.6.1.4. Behavior Modification Techniques: General Use/Specific Use
2.6.2. Behavioral Assessment: Observation
2.6.2.1. Define Target Behavior
2.6.2.2. Choose Measurement Methods
2.6.2.3. Record Sheets
2.6.2.4. Contextual Aspects of What Is Observed
2.6.3. Operant Techniques: Behavioral Development
2.6.3.1. Introduction
2.6.3.2. Theoretical Concepts
2.6.3.3. Reinforcement Programs
2.6.3.4. Molding
2.6.3.5. Chaining
2.6.3.6. Fading
2.6.3.7. Negative Reinforcement
2.6.3.8. Areas of Application
2.6.4. Operant Techniques: Behavior Reduction
2.6.4.1. Introduction
2.6.4.2. Extinction
2.6.4.3. Time Off
2.6.4.4. Cost of Response
2.6.4.5. Areas of Application
2.6.5. Operant Techniques: Contingency Organization Systems
2.6.5.1. Introduction
2.6.5.2. Token Economy
2.6.5.3. Behavioral Contracts
2.6.5.4. Areas of Application
2.6.6. Modeling Techniques
2.6.6.1. Introduction
2.6.6.2. Procedure
2.6.6.3. Modeling Techniques
2.6.6.4. Areas of Application
2.6.7. Frequent Behavior in Logopedics
2.6.7.1. Impulsivity
2.6.7.2. Apathy
2.6.7.3. Disinhibition
2.6.7.4. Anger or Aggressiveness
2.6.8. Conclusions

2.7. Rehabilitation in Occupational Therapy and Speech Therapy Applications
- 2.7.1. Occupational Therapy
- 2.7.2. Body Posture in Speech Therapy
- 2.7.3. Body Posture
- 2.7.4. Adaptations in Body Posture
- 2.7.5. Techniques in Neurorehabilitation: Bobath, Affolter, Basal Stimulation
- 2.7.6. Adaptations/Support Products Useful in Speech Therapy Rehabilitation
- 2.7.7. Objective of Occupational Therapy as an Integrative Measure

2.8. Child Neuropsychology
- 2.8.1. Introduction
- 2.8.2. Child Neuropsychology: Definition and General Foundation
- 2.8.3. Etiology
  - 2.8.3.1. Genetic and Environmental Factors
  - 2.8.3.2. Classification
    - 2.8.3.2.1. Neurodevelopmental Disorders
    - 2.8.3.2.2. Acquired Brain Injury
- 2.8.4. Neuropsychological Assessment
  - 2.8.4.1. General Aspects and Assessment Phase
  - 2.8.4.2. Evaluation Tests
- 2.8.5. Neuropsychological Intervention
  - 2.8.5.1. Family Intervention
  - 2.8.5.2. Educational Intervention
- 2.8.6. Cognitive Function Development
  - 2.8.3.1. First Childhood (0-2 Years of Age)
  - 2.8.3.2. Preschool Period (2-6 Years of Age)
  - 2.8.3.3. School Period (6-12 Years of Age)
  - 2.8.3.4. Adolescence (12-20 Years of Age)
- 2.8.7. Conclusions
- 2.8.8. Bibliography

2.9. Family Approach and Therapy
- 2.9.1. Introduction
- 2.9.2. Family Care in the Acute and Sub-Acute Phase
  - 2.9.2.1. Acute Phase: Hospital Stay
  - 2.9.2.2. Sub-Acute Phase: Return Home
  - 2.9.2.3. What about after Rehabilitation?
- 2.9.3. The Family as Part of the Rehabilitation Process
- 2.9.4. Needs Posed by the Family during the Rehabilitation Process
- 2.9.5. The Rehabilitation Team
- 2.9.6. Conclusions
- 2.9.7. Bibliography

2.10. Example of Transdisciplinary Rehabilitation: Clinical Case
- 2.10.1. Clinical Case
- 2.10.2. Theories of a CET
- 2.10.3. Broca's Aphasia: Anatomopathological Correlates and Disorders Associated with Broca's Aphasia
- 2.10.4. Neuropsychological Assessment
- 2.10.5. Neuropsychological Profile
- 2.10.6. Results
- 2.10.7. Deficits and Potentials
- 2.10.8. Injury Course and Treatment
- 2.10.9. Specific Objectives for Patients with Broca's Aphasia
- 2.10.10. Fundamentals of Rehabilitation

Module 3. Orofacial/Myofunctional Therapy (OMT) and Early Intervention

3.1. Neonatal Development
- 3.1.1. Evolutionary Development in Neonates
- 3.1.2. NBAS: Neonatal Behavioral Assessment Scale
- 3.1.3. Early Diagnosis
- 3.1.4. Neurologic Diagnosis
- 3.1.5. Habituation
- 3.1.6. Oral Motor Reflexes
- 3.1.7. Body Reflexes
- 3.1.8. Vestibular System
- 3.1.9. Social and Interactive Media
- 3.1.10 Use of NBAS in High-Risk Newborns

3.2. Eating Disorders in Children
- 3.2.1. Feeding Processes
- 3.2.2. Pediatric Swallowing Physiology
- 3.2.3. Phases in Skill Acquisition
- 3.2.4. Deficits
- 3.2.5. Multidisciplinary Work
- 3.2.6. Warning Symptomatology
- 3.2.7. Premature Orofacial Development
- 3.2.8. Feeding Methods: Parenteral, Enteral, Tube, Gastrectomy, Oral (Modified or Unmodified Diet)
- 3.2.9. Gastroesophageal Reflux

3.3. Neurodevelopment and Infant Diets
- 3.3.1. Embryonic Development
- 3.3.2. Appearance of Main Primary Functions
- 3.3.3. Risk Factors
- 3.3.4. Evolutionary Milestones
- 3.3.5. Synaptic Function
- 3.3.6. Immaturity
- 3.3.7. Neurological Maturity

3.4. Brain-Motor Skills
- 3.4.1. Innate Orofacial Motor Skills
- 3.4.2. Evolution of Orofacial Motor Patterns
- 3.4.3. Reflex Swallowing
- 3.4.4. Reflex Breathing
- 3.4.5. Reflex Sucking
- 3.4.6. Evaluation of Infant Oral Reflexes

3.5. Breastfeeding
- 3.5.1. Early Initiation
- 3.5.2. Orofacial Impact
- 3.5.3. Exclusivity
- 3.5.4. Optimal Nutrition
- 3.5.5. Spontaneous Maturation of Oral Musculature
- 3.5.6. Muscle Mobility and Synergy
- 3.5.7. Position
- 3.5.8. Therapeutic Recommendations
- 3.5.9. Intellectual Development
- 3.5.10. Intervention Program

3.6. Early Feeding Techniques
- 3.6.1. Newborn Feeding
- 3.6.2. Positioning Techniques
- 3.6.3. Signs of Good Positioning
- 3.6.4. Key Therapeutic Recommendations
- 3.6.5. Milk and Non-Milk Formulas
- 3.6.6. Classification of Formulas
- 3.6.7. Bottle Feeding Techniques
- 3.6.8. Spoon Techniques
- 3.6.9. Techniques for Low-Cut Cup Use
- 3.5.10. Techniques Tube Use or Alternative Feeding Systems

3.7. Speech Therapy Intervention in Neonates
- 3.7.1. Primary Functions Assessment
- 3.7.2. Re-Education of Primary Neuromotor Dysfunctions
- 3.7.3. Primary Intervention
- 3.7.4. Individual Treatment Planning and Coordination
- 3.7.5. Oral Motor Exercise Program I
- 3.7.6. Oral Motor Exercise Program II
- 3.7.7. Intervention with Families
- 3.7.8. Early Motor Activation

3.8. Child Swallowing Disorders. Block 1
- 3.8.1. Intake Analysis
- 3.8.2. Malnutrition
- 3.8.3. Respiratory Infections. Airway Unit
- 3.8.4. Complementary Explorations
- 3.8.5. Quantitative Explorations
- 3.8.6. Nutritional Treatment
- 3.8.7. Adaptive Treatment: Posture, Texture, Materials
- 3.8.8. Performance Program

3.9. Rehabilitative Treatment of Infant Oropharyngeal and Esophageal Dysphagia
- 3.9.1. Symptoms
- 3.9.2. Etiology
- 3.9.3. Neurological Damage in Children: High Probability of Presenting a Disorder
- 3.9.4. Infant Dysphagia
- 3.9.5. Phases of Normalized Swallowing in Pediatrics vs. Pathological Swallowing
- 3.9.6. Neurological Maturity: Cognitive, Emotional and Motor Coordination Status
- 3.9.7. Impossibility of Oral Feeding
- 3.9.8. Early care. High Probability of Recovering

3.10. Child Swallowing Disorders. Block II
- 3.10.1. Types. Neuroanatomical and Behavior-Based Classification
- 3.10.2. Functional Maturational Dysphagia
- 3.10.3. Degenerative Diseases
- 3.10.4. Cardiorespiratory Pathologies
- 3.10.5. Congenital Brain Damage
- 3.10.6. Childhood Acquired Brain Injury (CABI)
- 3.10.7. Craniofacial Syndromes
- 3.10.8. Autism Spectrum Disorders

Through the various textual and multimedia teaching formats provided by this qualification, you will gain a learning experience tailored to your study preferences"

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.

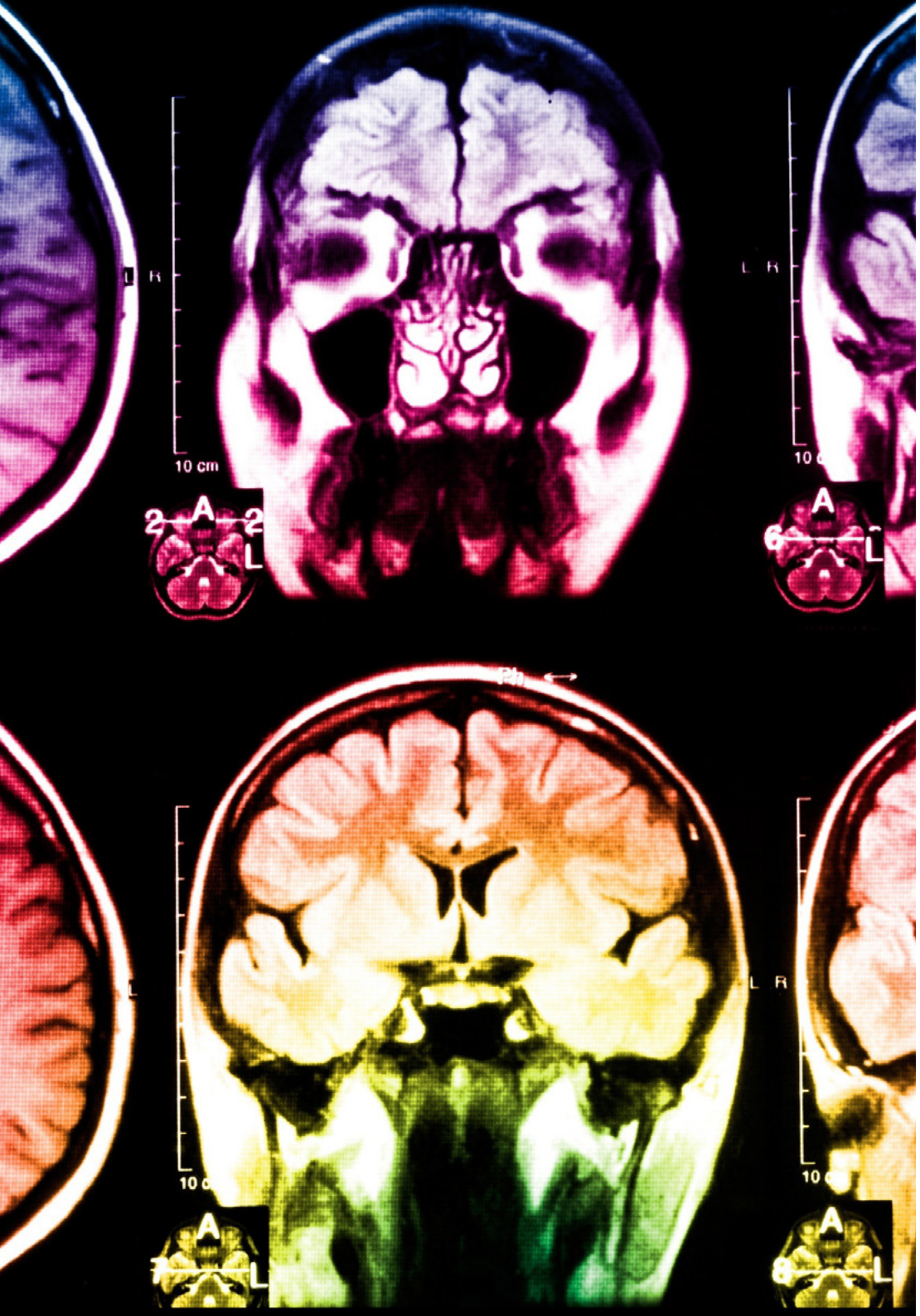
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

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

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

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

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

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

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

Practicing Skills and Abilities

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

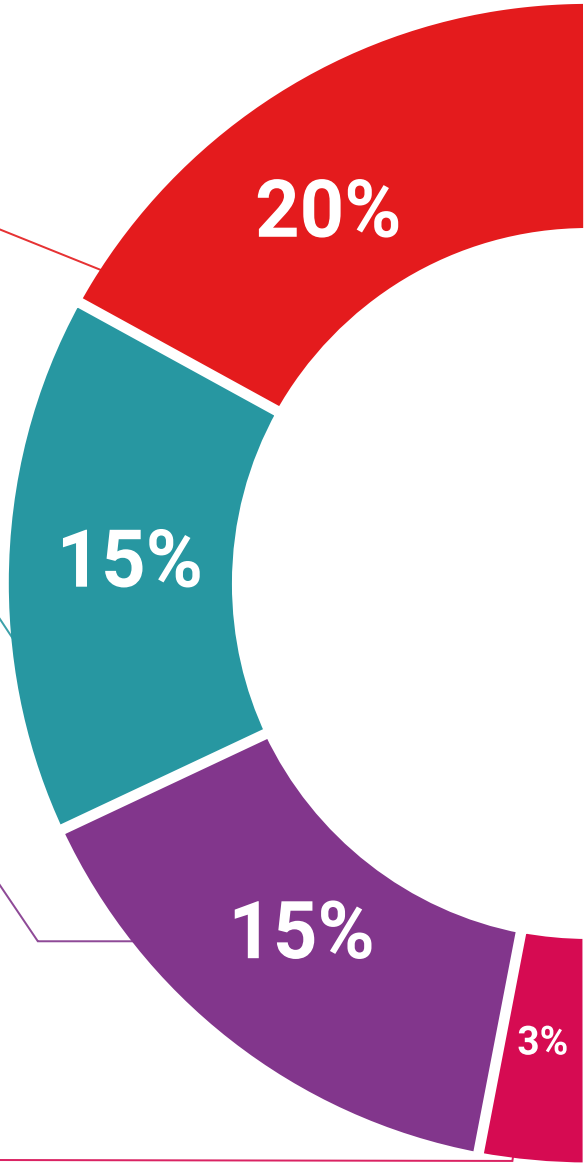
Interactive Summaries

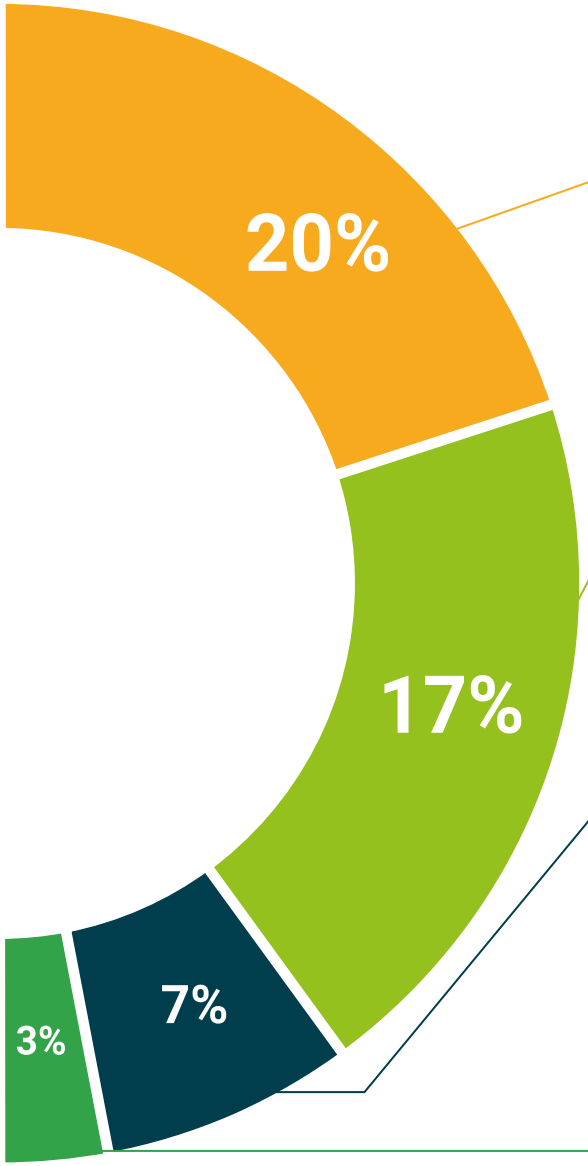
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

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





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

This Postgraduate Diploma in Speech Therapy Neurorehabilitation and Early Intervention guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Diploma issued by TECH Global University.

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

This private qualification will allow you to obtain a diploma for the **Postgraduate Diploma in Speech Therapy Neurorehabilitation and Early Intervention** 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.

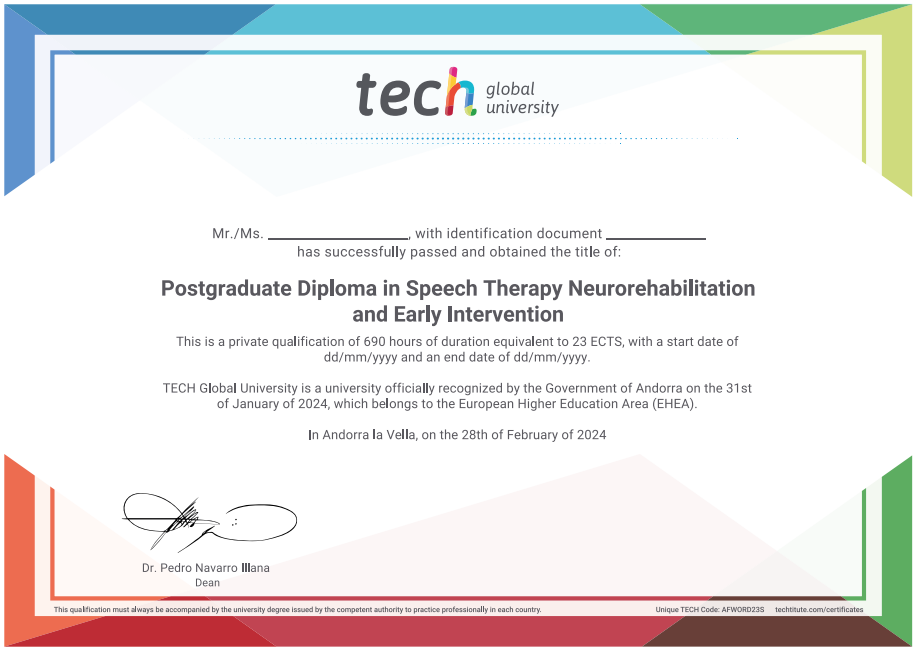
This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Speech Therapy Neurorehabilitation and Early Intervention**

Modality: **online**

Duration: **6 months**

Accreditation: **23 ECTS**


tech global university

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

Postgraduate Diploma in Speech Therapy Neurorehabilitation and Early Intervention

This is a private qualification of 690 hours of duration equivalent to 23 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

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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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Postgraduate Diploma

Speech Therapy Neurorehabilitation and Early Intervention

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Accreditation: **23 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma
Speech Therapy Neurorehabilitation and Early Intervention

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