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/education/postgraduate-diploma/postgraduate-diploma-speech-therapy-neurorehabilitation-early-intervention

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01

Introduction

Recent advances in the management of Acquired Brain Injury have enabled a comprehensive approach in areas such as psychomotricity and speech disorders. This is especially important in pediatric patients, who require speech therapy interventions fully tailored to their cognitive characteristics. For this reason, this program integrates the latest developments in the field into a single curriculum, providing professionals with up-to-date knowledge on topics such as neonatal developmental progress and rehabilitative treatment for pediatric oropharyngeal and esophageal dysphagia. All of this is offered in a 100% online format, supported by a highly esteemed faculty specialized in Neurorehabilitation.

This Postgraduate Diploma will give you access to the latest developments in Speech Therapy Neurorehabilitation for pediatric patients with Acquired Brain Injury"

The high degree of complexity involved in Acquired Brain Injury in pediatric patients has driven the continuous evolution of treatment strategies and intervention methods. Speech therapy has proven to be a highly effective tool in addressing these conditions, offering targeted solutions for disorders such as speech impairments and swallowing difficulties, among others. In the context of Early Intervention, Neurorehabilitation plays a crucial role, as early intervention can have a significant and positive impact on a child's cognitive development.

With this in mind, TECH has designed this Postgraduate Diploma, enabling professionals to gain in-depth knowledge of the latest techniques in the evaluation of executive functions, language disorders, and family therapy as a complement to speech therapy interventions. This qualification also features the most up-to-date developments in early diagnosis and the application of Orofacial and Myofunctional Therapy in pediatric patients.

The program is delivered entirely online, through a flexible learning model that allows professionals to balance their studies with day-to-day responsibilities. In addition, students will benefit from cutting-edge multimedia resources—case studies, interactive summaries, explanatory videos, and more. Altogether, this academic pathway offers an exceptional opportunity to stay up to date in the field of Speech Therapy Neurorehabilitation.

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

- The development of practical case studies presented by experts in Early Intervention in Speech Therapy Neurorehabilitation
- 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

Update your knowledge with the most advanced techniques in Orofacial Therapy for Early Internvention thanks to this qualification, which also allows you to study whenever and wherever you want thanks to its 100% online format"

The field of Speech Therapy Neurorehabilitation has undergone numerous changes in recent years. Catch up immediately with this program from TECH"

Case studies, videos, infographics, interactive summaries... The best educational technology will be at your fingertips in this qualification.

Acquire the most recent neuropsychological assessment methods in this Postgraduate Diploma from TECH, which includes the latest scientific evidence in this field.

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's design focuses on Problem-Based Learning, through which the professional must try to solve the different professional practice situations that arise during the academic program. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

The main goal of this program is to provide the student with the most advanced techniques in the field of Speech Therapy Neurorehabilitation applied to Early Intervention. To that end, its focus is geared toward achieving this objective, incorporating a comprehensive and up-to-date syllabus, a flexible online learning methodology, and a highly prestigious teaching faculty in this discipline. All of these components make this postgraduate diploma the best option for an immediate professional update.

Thanks to this TECH program, achieve your goal of staying up to date with the latest advances in this complex discipline"

General Objectives

- Develop a broad body of knowledge of the anatomical and functional basis of the central and peripheral nervous system
- Study the anatomy and function of the organs involved in basic functions such as respiration, phonation and swallowing
- Acquire knowledge in both assessment and speech therapy intervention
- Delve into rehabilitation techniques supported by clinical practice
- Develop intervention skills acquired from complementary disciplines such as neuropsychology, physiotherapy and psychology
- Become proficient in the assessment, diagnosis and treatment of neurofunctional and speech–language disorders in specific groups with neurodevelopmental or syndromic disorders
- Get to know various approaches and intervention programs in neurological and speech therapy neurorehabilitation

TECH uses the Relearning methodology, a highly effective learning system based on repetition and progressive learning and fully adapted to your personal and professional circumstances"

Specific Objectives

Module 1. Introduction to Neurorehabilitation I: Fundamentals of Neuroanatomy

- Know how the brain has been studied throughout history since antiquity
- Study the basis of the nervous system in order to understand how the brain works
- Detail the stages of embryological development of the nervous system in general terms
- Classify the different structures that form the central nervous system
- Study the structural and functional organization of the cerebral cortex
- Identify the general characteristics that make up the ascending and descending pathways of the spinal cord
- Recognize the differences between child and adult populations in clinical practice
- Study the different functions performed by the autonomic nervous system
- Know the characteristics that constitute motor control

Module 2. Introduction to Neurorehabilitation II: Relationship with Speech Therapy Treatment

- Know the different brain damage diseases as a basis for neuropsychological exploration
- Get to know the basic cognitive functions
- Know how to conceptualize the functions of attention, memory and perception
- Gain knowledge about the classifications, processes and systems
- Acquire basic knowledge of the assessment tests used
- Know the main alterations of the functions studied here
- Acquire an approach to the knowledge of executive functions and language
- Know what neuropsychological rehabilitation consists of and how to approach each cognitive function
- Know different behavior modification techniques (BMT)
- Develop some basic notions of how to apply BMT
- Acquire tools to act in the face of behavioral disorders
- Know how to apply BMT to speech therapy for improved results
- Know the clinical implication of occupational therapy in speech therapy rehabilitation
- Know the clinical implication of occupational therapy in speech therapy rehabilitation
- Know the role of families during the rehabilitation process
- Apply theoretical knowledge to clinical cases: the main objective of this topic is to know how to program rehabilitation treatments for BTC cases where aphasia is present
- Perform a sound multidisciplinary assessment and collect relevant information from the family to establish a comprehensive work plan adapted to each case

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

- Understand oral-facial behavior in children, both innate and acquired
- Recognize correct motor patterns in swallowing, breathing and sucking
- Detect functional alteration in diet early
- Understand the importance of orofacial growth and vegetative functions development at the pediatric level
- Detect the signs of proper posture and apply them in different positions for breastfeeding
- Learn how to use alternative techniques in infant diets
- Learn to manage the different intervention strategies at the pediatric orofacial level in children with swallowing disorders
- Know and develop action plans during diet that can be helpful in first instance with a high chance of success
- Create diet programs adapted and individualized to each case in a preventive, re-educative and rehabilitative way

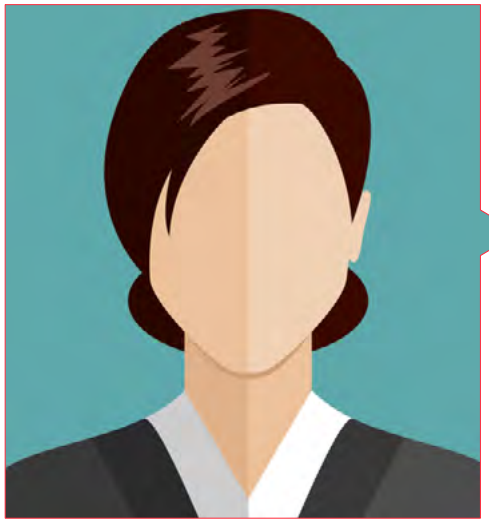
03

Course Management

TECH has selected a highly prestigious faculty for this program in the area of speech therapy neurorehabilitation. This team is composed of active professionals in the discipline who will bring the latest advances directly to the student. In this way, students will be able to immediately apply these updated techniques and procedures in their work, ensuring an effective and swift transfer of knowledge.

This program gives you the opportunity to learn about the most recent innovations in Speech Therapy Intervention and Neurorehabilitation from the most prestigious professionals in the field"

Management



Ms. Santacruz García, Estefanía

- Social Integrator and Clinical Speech Therapist at the Uner Clinic
- Teacher at CEFIRE
- Specialist in Orofacial and Myofunctional Therapy

Dr. Borrás Sanchís, Salvador

- Educational Counselor in the Valencian Government, Department of Education
- Specialist in Abile Educativa
- Partner Avance S.L.
- Pedagogical Advisor and External Collaborator at Aula Salud
- Pedagogical Director at iteNlearning
- Author of Guide for the Re-Education of Atypical Swallowing and Associated Disorders
- Pedagogical Director at the DEIAP Institute
- Bachelor's Degree in Psychology
- Hearing and Speech Teacher
- Certified in Speech Therapy

Professors

Ms. Carrasco Delarriva, Concha

- 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
- Bachelor's Degree in Psychology from the University of Granada
- Master's Degree in Clinical Neuropsychology from the Spanish Association of Clinical Cognitive Behavioral Psychology
- Postgraduate degree in Cognitive Rehabilitation from ISEP
- Expert in Child and Cognitive Rehabilitation by the Francisco de Vitoria University
- Qualified for the assessment of Autism with the Autism Diagnostic Observation Scale ADOS.

Ms. Álvarez Valdés, Paula del Carmen

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

Ms. Gallego Díaz, Mireia

- Hospital Speech Therapist
- Occupational Therapist
- Speech Therapist Expert in Swallowing Disorders

Ms. García Gómez, Andrea Maria

- Speech Therapist at UNER Clinic
- Speech Therapist at Integra Brain Injury
- Speech Therapist at Ineuro
- Degree in Speech Therapy
- Master's Degree in Speech Therapy Neurorehabilitation in Acquired Brain Injury

Ms. Jiménez Jiménez, Ana

- 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

- Psychologist. Alcaraz Institute
- Psychologist. IDEAT Center
- Neuropsychologist. Clínica UNER - Assessment and Integral Rehabilitation of Brain Injury
- Specialized in Child and Adult Neurorehabilitation at the Integral Center for Brain Injury
- Master's Degree in Special Educational Needs and Early Intervention, Developmental and Child Psychology. International University of Valencia
- Master's Degree in Clinical Neuropsychology. Spanish Association of Clinical Cognitive Behavioral Psychology (AEPCCC)
- Master's Degree in General Health Psychology. International University of Valencia
- Bachelor's Degree in Psychology. 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. 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. 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

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

Ms. Muñoz Boje, Rocío

- Occupational Therapist Specialized in Neurorehabilitation

Ms. Martín Bielsa, Laura

- Speech Therapist Expert in Speech Pathology, Child Development and Early Childhood Attention
- Diploma in Teaching and Dean of the Professional Association of Speech Therapists of Aragon
- Director of the Master's Degree in Vocal Therapy, Cardenal Herrera University

A unique, essential, and decisive educational experience to boost your professional growth"

04

Structure and Content

This program has been structured in 3 specific modules, through which the student will be able to learn the latest scientific evidence on Neurorehabilitation, Speech Therapy and Neuroanatomy. In addition, you will enjoy an optimal learning experience, since the didactic materials will be presented and guided from the most effective teaching methodology in the educational market: *Relearning*. This system is focused on repetition and progressive study, ensuring the student makes the most of their time.

This syllabus includes the latest advances in Neuropsychological Rehabilitation and in the evaluation of cognitive functions in pediatric patients with acquired brain injury (ABI)"

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. Myelenization
- 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. 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: Relationship with 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 Tumours
- 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

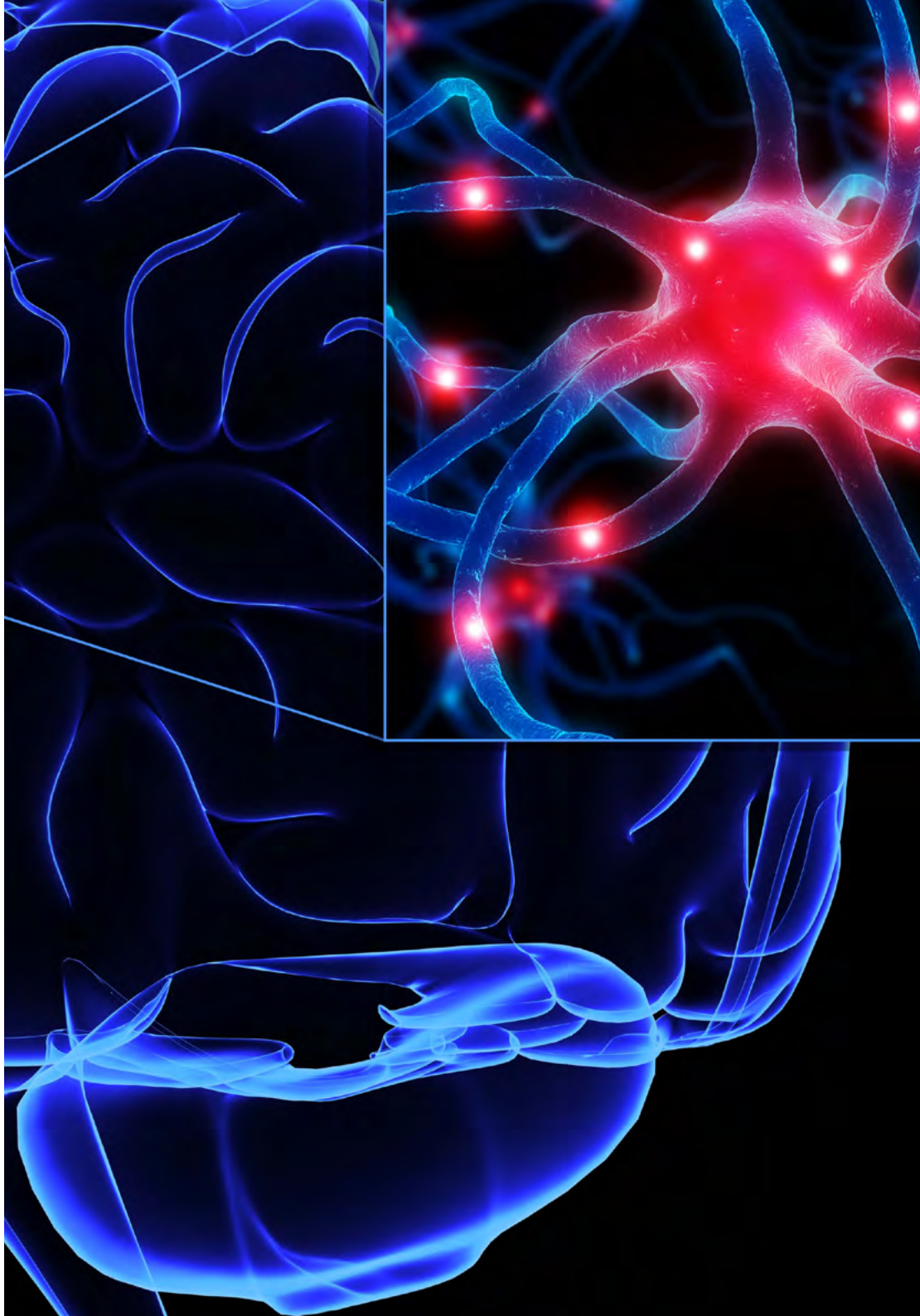
2.2. Cognitive Functions I: Attention, Perception and Memory
- 2.2.1. Introduction to Cognitive Functions
- 2.2.2. Alertness System
  - 2.2.2.1. Concept
  - 2.2.2.2. Assessment
  - 2.2.2.3. Abnormalities
- 2.2.3. Attention
  - 2.2.3.1. Focused/Selective Attention
    - 2.2.3.1.1. Concept
    - 2.2.3.1.2. Assessment
    - 2.2.3.1.3. Abnormalities
  - 2.2.3.2. Sustained Attention
    - 2.2.3.2.1. Concept
    - 2.2.3.2.2. Assessment
    - 2.2.3.2.3. Abnormalities
  - 2.2.3.3. Alternating Attention
    - 2.2.3.3.1. Concept
    - 2.2.3.3.2. Assessment
    - 2.2.3.3.3. Abnormalities
  - 2.2.3.4. Divided Attention
    - 2.2.3.4.1. Concept
    - 2.2.3.4.2. Assessment
    - 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. Assessment
  - 2.2.4.5. Abnormalities
- 2.2.5. Perception
  - 2.2.5.1. Concept
  - 2.2.5.2. Assessment
  - 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 Brain Injury vs. Local
- 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. Injury Time Evolution
- 2.4.10 Intrinsic Patient-Related Variables
- 2.4.11 Quantitative Assessment vs. Qualitative
- 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 Speech Therapy Applications
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. Scope 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. Scope 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. Scope 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. Scope of Application

2.6.7. Frequent Behavior in Logopedics
- 2.6.7.1. Impulsiveness
- 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 Fundamentals
- 2.8.3. Etiology
  - 2.8.3.1. Genetic and Environmental Factors
  - 2.8.3.2. Classification
    - 2.8.3.2.1. Neurodevelopment 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
  - 2.8.6.1. First Childhood (0-2 Years of Age)
  - 2.8.6.2. Preschool Period (2-6 Years of Age)
  - 2.8.6.3. School Period (6-12 Years of Age)
  - 2.8.6.4. 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. A Transdisciplinary Rehabilitation Example: Clinical Case
- 2.10.1. Clinical Cases
- 2.10.2. CET Theories
- 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
- 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 Suction
- 3.4.6. Assessing Infant Oral Reflexes

3.5. Nursing
- 3.5.1. Early Start
- 3.5.2. Impact at the Orofacial Level
- 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
- 3.9.7. Impossibility of Oral Feeding
- 3.9.8. Early care. High Probability of Recovering

3.10. Child Swallowing Disorders 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

TECH has integrated into a single academic program the most comprehensive and advanced syllabus, the most effective and flexible methodology on the market, and a faculty of great international prestige. Don't wait any longer and enroll"

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.

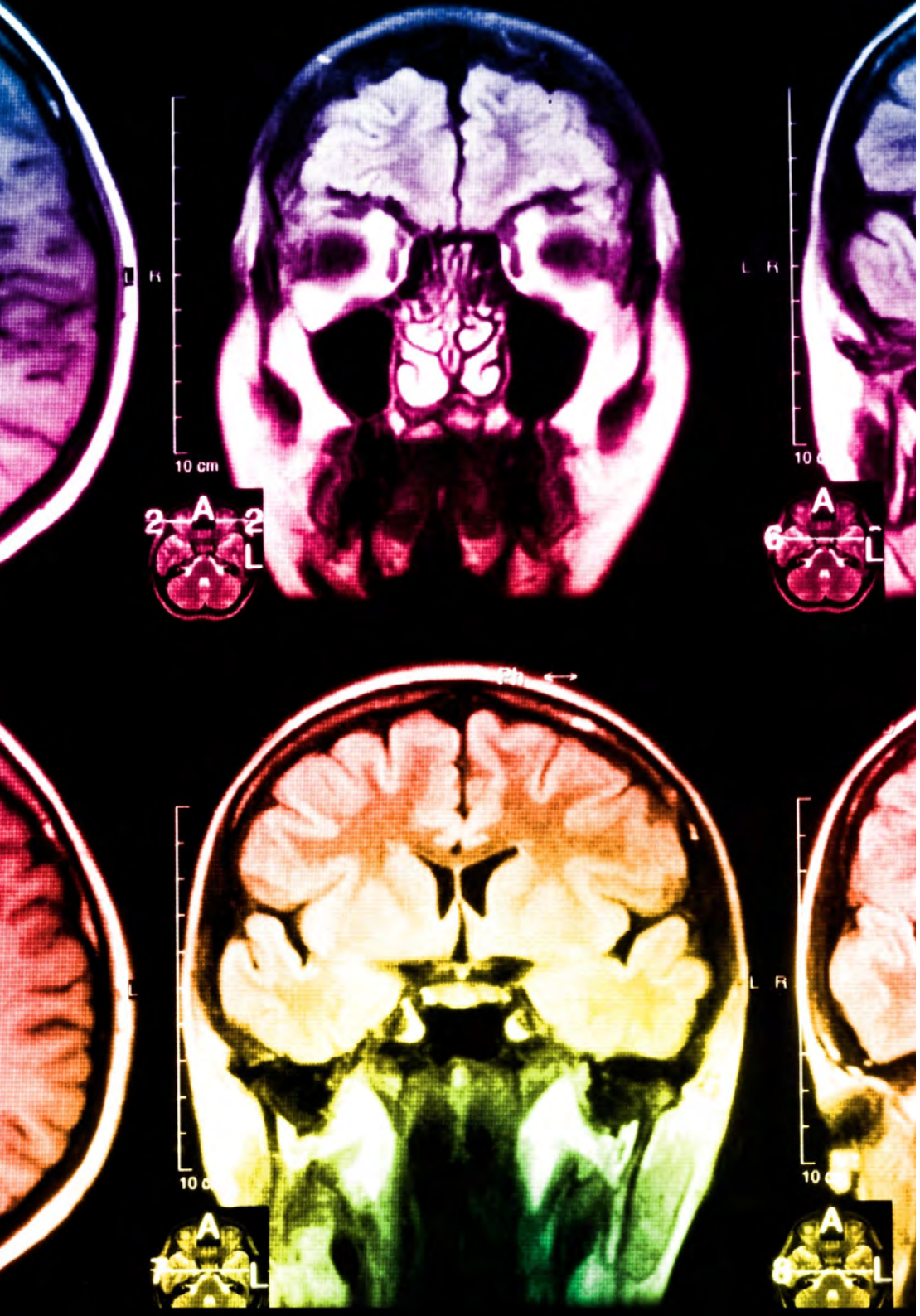
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

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.

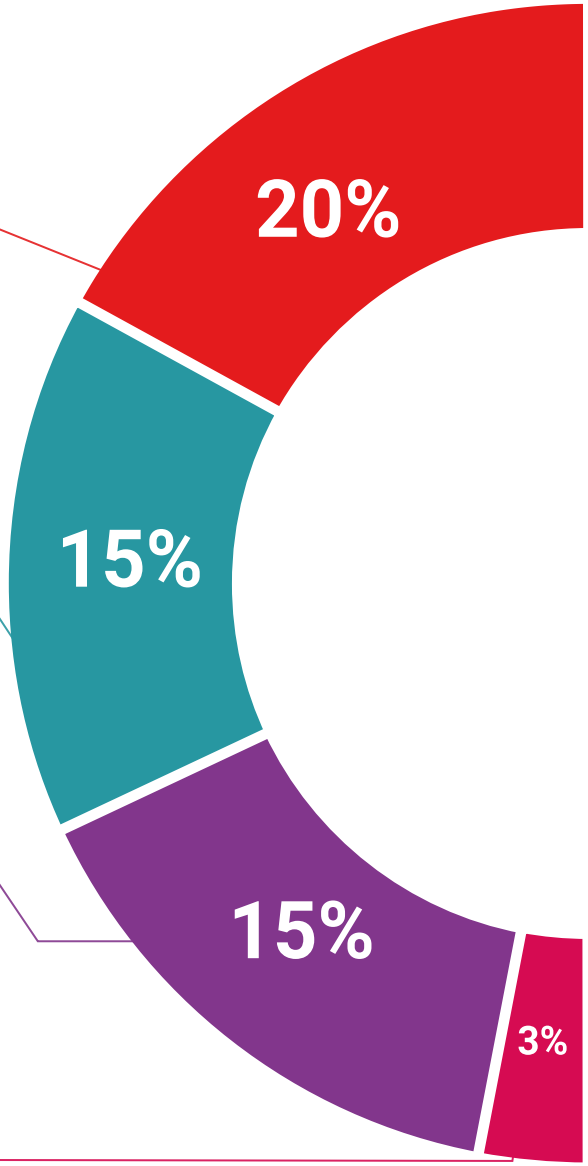
Interactive Summaries

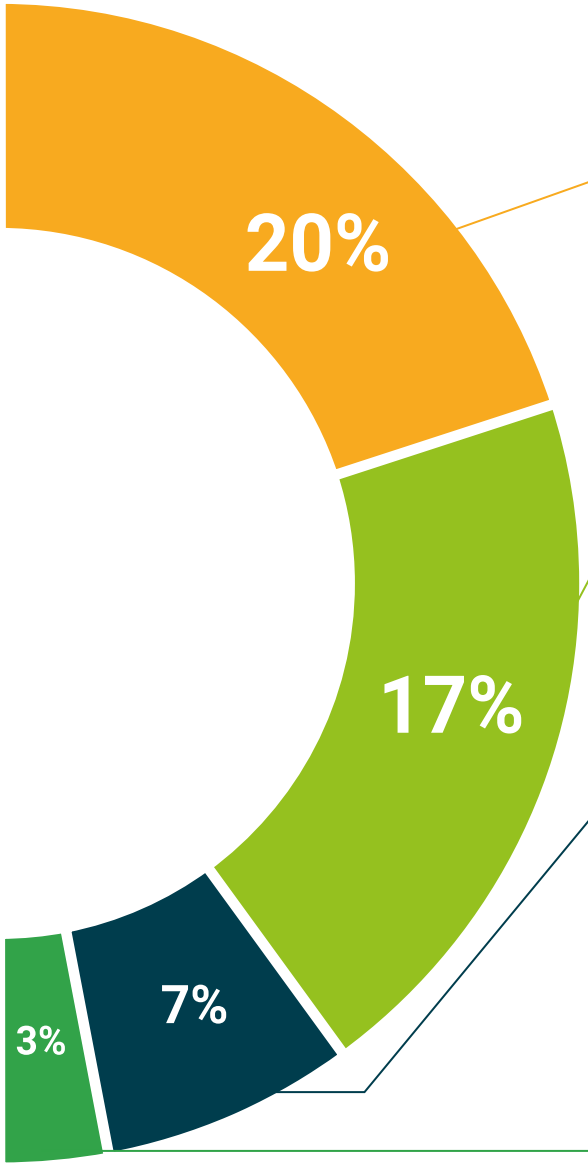
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 monhts**

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

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.

tech global university

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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