

Postgraduate Diploma

Speech Therapy Research and Techniques



Postgraduate Diploma Speech Therapy Research and Techniques

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-speech-therapy-research-techniques

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01

Introduction to the Program

Speech therapy is an essential discipline for the diagnosis and treatment of language, speech and communication disorders. With the advancement of intervention techniques and emerging technologies, clinicians now have access to more sophisticated tools to improve the effectiveness of treatments. Faced with this, physicians need to have comprehensive knowledge of the latest advances in speech therapy research and how these innovations are transforming the clinical management of these conditions. To support them in this work, TECH presents a pioneering university program focused on the field of speech therapy research and techniques. At the same time, it is delivered in a convenient online format adapted to the schedule of busy experts.



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With this 100% online Postgraduate Diploma, you will carry out scientific research in the field of speech therapy that will promote the development of new therapeutic approaches for Language Disorders"

A recent report by the World Health Organization indicates that approximately 12% of children worldwide suffer from language disorders, highlighting the importance of early and effective intervention. In response, the field of speech therapy—dedicated to the diagnosis and treatment of these conditions—has seen significant advancements in both techniques and therapeutic approaches. Therefore, specialists must integrate the most innovative research strategies into their daily practice to enhance clinical outcomes for affected patients.

With this in mind, TECH has developed a cutting-edge Postgraduate Certificate in Research and Techniques in Speech Therapy. Designed by leading professionals in the healthcare field, the academic program explores topics ranging from the fundamentals of the scientific method and data analysis processing to the most advanced psychometric techniques. As a result, graduates will gain a deep understanding of research methodologies applied to speech therapy, enabling them to design and conduct advanced clinical studies. They will also be equipped to implement precise psychometric techniques in the diagnosis and treatment of language disorders, improving the quality of care and contributing to the advancement of the discipline.

Moreover, the program is delivered in a fully online format, allowing professionals to engage with the content flexibly and conveniently. In this way, the only thing they will need to update their knowledge is a device with Internet access (using their cell phone, computer or tablet). In addition, the university program offers the most avant-garde methodology in today's market: Relearning. This teaching system, pioneered by TECH, is based on the repetition of the most important content to guarantee a natural updating of knowledge that lasts in the memory of graduates.

This **Postgraduate Diploma and Speech Therapy Research and Techniques** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ The development of case studies presented by experts in Speech Therapy Research and Techniques
- ♦ 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
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies in medical practice
- ♦ 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



You will learn more about the most modern methods of assessing language disorders at the world's best online university, according to Forbes"

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You will promote the development of an ethical healthcare praxis, focused on the well-being of users and respecting the principles of confidentiality”

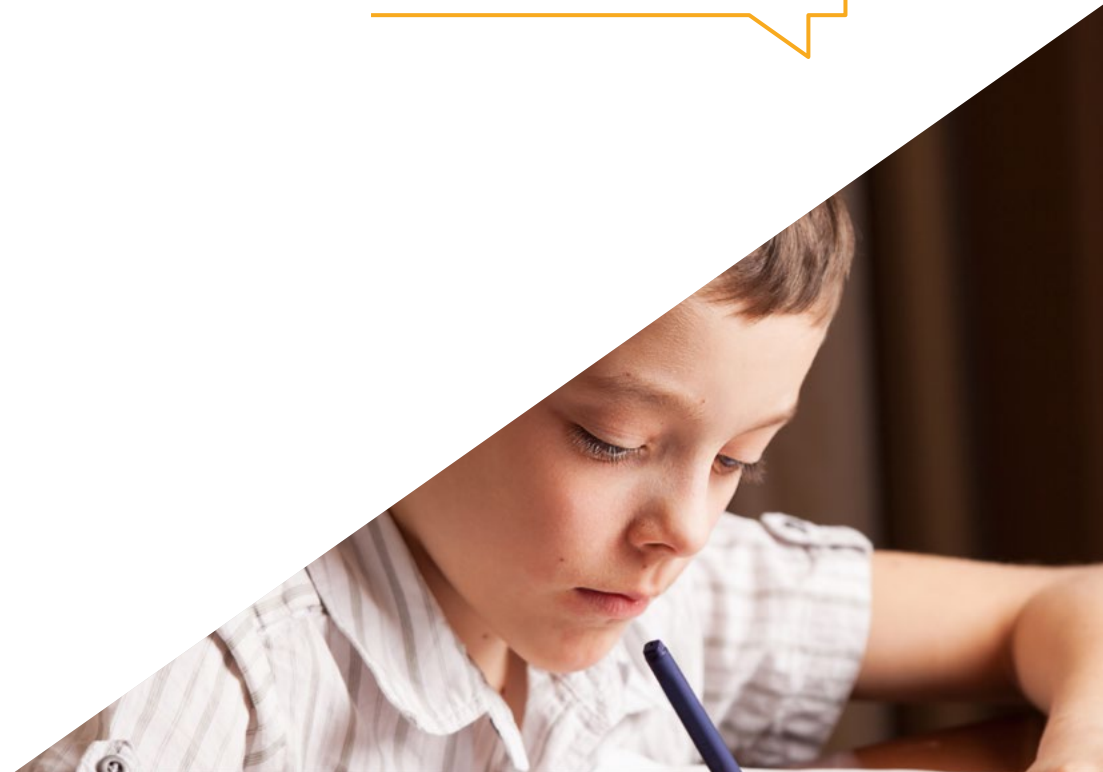
Its teaching staff includes professionals from the field of Speech Therapy Research and Techniques, who bring their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

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 an immersive learning experience designed to prepare for real-life situations.

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

You will delve into the application of language rehabilitation techniques based on brain stimulation and neuroplasticity.

With TECH's revolutionary Relearning system, you will reduce the long hours of study and memorization. You will update your knowledge in a natural way!



02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.



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Study at the largest online university in the world and ensure your professional success. The future begins at TECH”

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

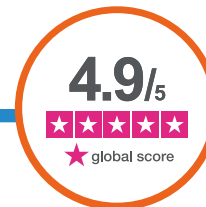
Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



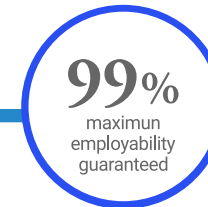
Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



02 Syllabus

The teaching materials that make up this Postgraduate Diploma have been designed by leading figures in the field of Speech Therapy Research and Techniques. The syllabus will analyze issues ranging from the main statistical concepts or applications of Information and Communication Technologies in the health field to the different research methods in the speech therapy area. In this way, graduates will be qualified to carry out high-level clinical research, implement new technologies in speech therapy practice and contribute to the development of innovative methods that improve the effectiveness of treatments.



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You will gain a deeper understanding of the use of emerging technologies to optimize the treatment of Language Disorders”

Module 1. Statistics

- 1.1. Introduction to Statistics
 - 1.1.1. Basic Concepts
 - 1.1.2. Types of Variables
 - 1.1.3. Statistical Information
- 1.2. Data Record Sorting and Classifying
 - 1.2.1. Description of Variables
 - 1.2.2. Frequency Distribution Table
 - 1.2.3. Quantitative and Qualitative Frequency Distribution Tables
- 1.3. Applications of Information and Communication Technologies (ICT) and Practical Systems
 - 1.3.1. Basic Concepts
 - 1.3.2. Tools
 - 1.3.3. Data Representation
- 1.4. Data Summary Measures I
 - 1.4.1. Descriptive Statistics
 - 1.4.2. Centralization Measurements
 - 1.4.3. Measures of Dispersion
 - 1.4.4. Measures of Shape and Position
- 1.5. Data Summary Measures II
 - 1.5.1. Box Plots
 - 1.5.2. Identifying Outliers
 - 1.5.3. Transformation
- 1.6. Statistical Analysis of the Relationship between the Two Variables
 - 1.6.1. Tabulation
 - 1.6.2. Contingency Tables and Graphical Representations
 - 1.6.3. Linear Relationship between Quantitative Variables
- 1.7. Time Series and Index Numbers
 - 1.7.1. Time Series
 - 1.7.2. Rates of Change
 - 1.7.3. Index Numbers
 - 1.7.4. The Consumer Price Index (CPI) and Deflated Time Series

- 1.8. Introduction to Probability: Calculation and Basic Concepts
 - 1.8.1. Basic Concepts
 - 1.8.2. Set Theory
 - 1.8.3. Probability Calculation
- 1.9. Random Variables and Probability Distributions
 - 1.9.1. Random Variables
 - 1.9.2. Variable Measurements
 - 1.9.3. Function of Probability
- 1.10. Probability Models for Random Variables
 - 1.10.1. Probability Calculation
 - 1.10.2. Discrete Random Variables
 - 1.10.3. Continuous Random Variables
 - 1.10.4. Models Derived from Normal Distribution

Module 2. Speech Therapy Research Methods

- 2.1. Basic Notions of Investigation: Science and the Scientific Method
 - 2.1.1. Definition of the Scientific Method
 - 2.1.2. Analytical Method
 - 2.1.3. Synthetic Method
 - 2.1.4. Inductive Method
 - 2.1.5. Cartesian Thought
 - 2.1.6. Rules of the Cartesian Method
 - 2.1.7. Methodical Doubt
 - 2.1.8. The First Cartesian Principle
 - 2.1.9. Induction Procedures According to J. Mill Stuart
- 2.2. Research Paradigms and Methods Derived from These
 - 2.2.1. How Do Research Ideas Arise?
 - 2.2.2. What to Research in Education?
 - 2.2.3. Research Problem Statement
 - 2.2.4. Background, Justification and Research Objectives
 - 2.2.5. Theoretical Foundation
 - 2.2.6. Hypotheses, Variables and Definition of Operational Concepts
 - 2.2.7. Choosing a Research Design
 - 2.2.8. Sampling in Quantitative and Qualitative Studies

- 2.3. The General Process of Research: Quantitative and Qualitative Focus
 - 2.3.1. Epistemological Assumptions
 - 2.3.2. Approach to Reality and the Object of Study
 - 2.3.3. Subject-Object Relationship
 - 2.3.4. Objectivity
 - 2.3.5. Methodological Processes
 - 2.3.6. Integration of Methods
- 2.4. Phases and Stages of Qualitative Research
 - 2.4.1. Phase 1: Conceptual Phase
 - 2.4.2. Phase 2: Planning and Design Phase
 - 2.4.3. Phase 3: Empirical Phase
 - 2.4.4. Phase 4: Analytical Phase
 - 2.4.5. Phase 5: Diffusion Phase
- 2.5. Types of Quantitative Research
 - 2.5.1. Historical Research
 - 2.5.2. Correlation Research
 - 2.5.3. Case Studies
 - 2.5.4. "Ex Post Facto" Research of Completed Events
 - 2.5.5. Quasi-Experimental Research
 - 2.5.6. Experimental Research
- 2.6. Phases and Stages of Qualitative Research
 - 2.6.1. Phase 1: Preparation Phase
 - 2.6.2. Phase 2: Field Phase
 - 2.6.3. Phase 3: Analytical Phase
 - 2.6.4. Phase 4: Informative Phase
- 2.7. Types of Qualitative Research
 - 2.7.1. Ethnography
 - 2.7.2. Grounded Theory
 - 2.7.3. Phenomenology
 - 2.7.4. The Biographical Method and Life History
 - 2.7.5. The Case Study
 - 2.7.6. Content Analysis
 - 2.7.7. Examination of Speech
 - 2.7.8. Participatory Action Research

- 2.8. Techniques and Instruments for Collecting Quantitative Data
 - 2.8.1. The Structured Interview
 - 2.8.2. The Structured Questionnaire
 - 2.8.3. Systematic Observation
 - 2.8.4. Attitude Scales
 - 2.8.5. Statistics
 - 2.8.6. Secondary Sources of Information
- 2.9. Techniques and Instruments for Collecting Qualitative Data
 - 2.9.1. Unstructured Interview
 - 2.9.2. In Depth Interview
 - 2.9.3. Focus Groups
 - 2.9.4. Simple, Unregulated and Participant Observation
 - 2.9.5. Life Stories
 - 2.9.6. Diaries
 - 2.9.7. Content Analysis
 - 2.9.8. The Ethnographic Method
- 2.10. Data Quality Control
 - 2.10.1. Requirements for a Measuring Instrument
 - 2.10.2. Processing and Analysis of Quantitative Data
 - 2.10.3. Processing and Analysis of Qualitative Data

Module 3. Psychometric Techniques in Speech Therapy

- 3.1. Introduction to Psychometry
 - 3.1.1. Definition and Purpose of Psychometrics in the Context of Speech Therapy
 - 3.1.1.1. Fundamental Objectives in the Study of Psychometrics
 - 3.1.2. The Measurement of the Psychological
 - 3.1.2.1. Main Methods Used in the Measurement of Psychological Phenomena
 - 3.1.2.2. Comparison between Objective and Subjective Measures
 - 3.1.3. Definition of Psychometrics and Historical Background
 - 3.1.3.1. Brief History of the Development of Psychometrics
 - 3.1.3.2. Modern Definition of Psychometrics and its Role in the Social Sciences

- 3.1.4. Psychological Tests: Definition, Classification and Uses
 - 3.1.4.1. Typology of Psychological Tests
 - 3.1.4.2. Uses and Applications in Psychological, Educational and Occupational Assessment
- 3.2. Test Construction Process
 - 3.2.1. Definition and Key Steps in the Psychological Test Construction Process
 - 3.2.1.1. Importance of Rigor and Validity in Test Construction
 - 3.2.2. Phases for the Construction of a Test
 - 3.2.2.1. Initial Stages: Definition of the Construct and Objective of the Test
 - 3.2.2.2. Item Development and Validation, as well as the Pilot Test
 - 3.2.3. Guidelines for Writing Items
 - 3.2.3.1. Recommendations to Ensure Clarity and Objectivity in the Formulation of Questions
 - 3.2.3.2. Methods to Avoid Bias and Ensure the Relevance of the Items
 - 3.2.4. Introduction to the Use of Software for Psychometric Analysis
 - 3.2.4.1. Introduction to the Most Common Computer Tools in Psychometric Analysis
 - 3.2.4.2. Software Applications for the Construction and Validation of Tests
- 3.3. Item Analysis
 - 3.3.1. Main Methods of Item Analysis in Psychometric Assessment
 - 3.3.1.1. Objectives and Advantages of Detailed Analysis of Test Items
 - 3.3.2. Descriptive Statistics
 - 3.3.2.1. Key Concepts: Mean, Standard Deviation, Skewness and Kurtosis in Items
 - 3.3.2.2. Application of Descriptive Statistics to Understand the Distribution of Responses
 - 3.3.3. Discrimination Indices
 - 3.3.3.1. Definition and Calculation of the Discrimination Index of an Item
 - 3.3.3.2. Importance of the Discrimination Index in the Assessment of the Quality of the Test
- 3.3.4. Validity Index
 - 3.3.4.1. Methods for Calculating and Assessing the Validity of Test Items
 - 3.3.4.2. Relationship between the Validity Index and the Predictive Efficacy of the Test
- 3.3.5. Analysis of Incorrect Options in Multiple Choice Items
 - 3.3.5.1. Strategies for Identifying and Correcting Possible Biases in Incorrect Options
 - 3.3.5.2. Techniques to Improve the Quality and Discrimination of Answer Options
- 3.3.6. Correction of the Effects of Chance in Multiple-Choice Items
 - 3.3.6.1. Statistical Methods for Adjusting the Influence of Chance on the Results of Multiple-Choice Items
 - 3.3.6.2. Techniques for Improving the Reliability of Items in Chance Situations
- 3.3.7. Item Analysis with Jamovi
 - 3.3.7.1. Specific Procedures for Performing the Psychometric Analysis of Items Using Jamovi Software
 - 3.3.7.2. Practical Application in the Correction and Improvement of a Test
- 3.4. Classical Test Theory
 - 3.4.1. Classical Test Theory (CTT)
 - 3.4.1.1. Main Objectives of CTT in Psychometrics
 - 3.4.2. Assumptions of the Classical Linear Model
 - 3.4.2.1. Explanation of the Assumptions Underlying Classical Theory, Such as Linearity and Homogeneity
 - 3.4.2.2. Implications of these Assumptions in Test Design
 - 3.4.3. Reliability Coefficient and Parallel Forms
 - 3.4.3.1. Definition and Calculation of the Reliability Coefficient
 - 3.4.3.2. between Different Reliability Estimation Methods: Test-Retest, Parallel Forms, Chronbach's Alpha, Inter-Item and Inter-Rater Correlation Index
 - 3.4.4. Reliability of Scores in a Long Test (Many Items)
 - 3.4.4.1. Effects of Test Length on the Reliability of Scores Obtained
 - 3.4.4.2. Methods for Optimizing Reliability Without Excessively Increasing Test Length

- 3.5. Reliability of Score
 - 3.5.1. Definition of Reliability in the Psychometric Context and its Importance in Test Assessment
 - 3.5.1.1. Objectives of Studying the Reliability of Scores Obtained
 - 3.5.2. Conceptualization of Reliability
 - 3.5.2.1. Distinction between the Different Types of Reliability: Stability, Internal Consistency and Equivalence
 - 3.5.2.2. Importance of Reliability in the Accuracy of Psychological Assessments
 - 3.5.3. Approaches to Reliability
 - 3.5.3.1. Methods and Models for Assessing the Reliability of a Test
 - 3.5.3.2. Different Statistical Approaches: Cronbach's Alpha Coefficient, Inter-rater
 - 3.5.4. Typical Error of Measurement: Calculation and Applications
 - 3.5.4.1. Definition and Calculation of the Typical Error of Measurement
 - 3.5.4.2. Practical Applications of Error in the Interpretation of Test Scores
 - 3.5.5. Estimating Reliability with Jamovi
 - 3.5.5.1. Techniques and Tools in Jamovi for Calculating the Reliability of Test Scores
 - 3.5.5.2. Practical Application of the Software in Reliability Estimation
- 3.6. Evidence of Validity I
 - 3.6.1. Definition of Validity and its Importance in Psychometric Assessment
 - 3.6.1.1. Objectives of Validity Analysis in Test Construction
 - 3.6.2. Conceptualization of Validity
 - 3.6.2.1. Distinction between Content, Criterion and Construct Validity
 - 3.6.2.2. The Importance of Adequate Validity for the Utility of the Test
 - 3.6.3. Evidence Based on Test Content
 - 3.6.3.1. Methods for Obtaining Evidence of Validity Based on the Content of the Items
 - 3.6.3.2. Procedures for Ensuring that the Content of the Test Adequately Represents the Construct Being Measured
- 3.6.4. Evidence Based on Response Processes
 - 3.6.4.1. How Validity is Analyzed Based on the Cognitive and Psychological Processes Involved in Responses
 - 3.6.4.2. Techniques for Obtaining Evidence through the Observation of Responses
- 3.6.5. Evidence-based Consequences of Test Application
 - 3.6.5.1. Assessment of the Consequences of Decisions Made Based on the Test Results
 - 3.6.5.2. Importance of Examining the Long-Term Effects of Test Application
- 3.7. Evidence of Validity II
 - 3.7.1. Specific Objectives in the Identification of Validity
 - 3.7.1.1. Determining Content Validity
 - 3.7.1.2. Determining Criteria Validity
 - 3.7.1.3. Determining Construct Validity
 - 3.7.1.4. Determining Convergent Validity
 - 3.7.2. The Internal Structure of the Test
 - 3.7.2.1. Evaluation of the Internal Structure of the Test Using Statistical Methods Such as Factor Analysis
 - 3.7.2.2. The Relationship Between the Structure of the Test and the Construct It Measures
 - 3.7.3. The Relationship With Other Variables
 - 3.7.3.1. Methods for Establishing Validity Through the Relationship With External Variables
 - 3.7.3.2. Types of Relationships: Convergent, Discriminant and Predictive
 - 3.7.4. Factors Affecting Validity Coefficients
 - 3.7.4.1. Analysis of the Factors that Can Influence the Magnitude of the Validity Coefficients
 - 3.7.4.2. Strategies for Improving the Validity of the Test

- 3.8. Introduction to Exploratory Factor Analysis
 - 3.8.1. Exploratory Factor Analysis (EFA) Technique
 - 3.8.1.1. Objectives and Advantages of Using EFA in Psychometrics
 - 3.8.2. Basic Concepts
 - 3.8.2.1. Definitions: Factors, Factor Loadings, Explained Variance
 - 3.8.2.2. Purpose and Use of EFA in Reducing Dimensions
 - 3.8.3. Steps in Exploratory Factor Analysis
 - 3.8.3.1. Detailed Description of the Steps to Follow in Exploratory Factor Analysis
 - 3.8.3.2. Methods for Determining the Number of Factors and Factor Rotation
 - 3.8.4. Recommendations and Considerations
 - 3.8.4.1. Best Practices and Precautions to Keep in Mind When Performing an EFA
 - 3.8.4.2. Limitations of the EFA and How to Interpret It Correctly
- 3.9. Interpretation of Scores
 - 3.9.1. Definition of Methods for Interpreting Scores in Psychometric Tests
 - 3.9.1.1. Objectives and Fundamental Principles in the Interpretation of Scores
 - 3.9.2. Interpretations Referring to Norms
 - 3.9.2.1. Comparison of Scores with Norms based on Representative Samples
 - 3.9.2.2. Types of Norms: Percentage Norms, Standard Scoring Norms, Scales
 - 3.9.3. Interpretations Referring to the Criterion
 - 3.9.3.1. Definition and Use of Criteria for Interpreting Test Scores
 - 3.9.3.2. Methods for Linking Scores to Specific Performance Indicators: Spearman's Correlation





- 3.10. Item Response Theory
 - 3.10.1. Definition and Objectives of Item Response Theory (IRT)
 - 3.10.1.1. Key Differences Between IRT and Classical Test Theory
 - 3.10.2. Advantages of Item Response Theory over Classical Test Theory
 - 3.10.2.1. Comparison Between the Two Theories and Their Respective Applications
 - 3.10.2.2. Benefits of IRT in Terms of Accuracy and Adaptability
 - 3.10.3. Basic Concepts
 - 3.10.3.1. Explanation of the Fundamental Concepts in IRT: Response Probability, Discrimination, Difficulty
 - 3.10.4. Assumptions
 - 3.10.4.1. Fundamental Assumptions in the Application of IRT
 - 3.10.4.2. Implications of these Assumptions for the Validity and Reliability of the Tests
 - 3.10.5. Models for Dichotomous Items
 - 3.10.5.1. Description of IRT Models for Items with Binary Responses (Right/Wrong)
 - 3.10.5.2. Methods for Estimating Parameters in Dichotomous Models
 - 3.10.6. Precision of IRT Scores
 - 3.10.6.1. Assessing the Reliability of Scores Using IRT
 - 3.10.6.2. Factors Affecting the Precision of Estimates
 - 3.10.7. TRI Applications
 - 3.10.7.1. IRT Applications in Adaptive Testing, Item Analysis and Accurate Assessment of Competence

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The interactive summaries for each module will allow you to consolidate the concepts of psychometric techniques in Speech Therapy in a more dynamic way”

04

Teaching Objectives

This Postgraduate Diploma will provide physicians with the most sophisticated tools for specializing in the diagnosis and treatment of Language Disorders. Through a comprehensive approach, graduates will acquire skills in advanced speech therapy techniques and applied clinical research. In addition, specialists will be highly trained to develop personalized therapies, lead research projects and contribute to the advancement of speech therapy practices, improving patient care.



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You will implement speech therapy techniques based on the latest scientific evidence for the treatment of language disorders at various ages”



General Objectives

- ♦ Use diagnostic tests and explain research techniques in Neuropsychology of Language
- ♦ Delve into the key concepts of Statistics for selecting samples
- ♦ Apply assessment techniques to diagnose language disorders and write speech therapy reports
- ♦ Analyze the linguistic effects derived from Neurodegenerative Diseases, such as Dementia and Multiple Sclerosis
- ♦ Define the concept of psychometrics and its relationship with Speech Therapy, understanding its application in the evaluation of Language and Communication Disorders
- ♦ Identify and diagnose Language Disorders in various contexts, considering both the clinical manifestations and the neuropsychological aspects involved
- ♦ Design and apply effective interventions for the treatment of speech disorders, adapted to the needs of the patient
- ♦ Develop skills to assess and adjust speech therapy interventions, based on scientific evidence and advances in the field





Specific Objectives

Module 1. Statistics

- ♦ Apply statistical tools to analyze data in speech therapy studies
- ♦ Design speech therapy research studies using appropriate statistical techniques

Module 2. Speech Therapy Research Methods

- ♦ Develop skills to design and carry out research studies in the field of speech therapy
- ♦ Assess the quality and validity of research studies applied in speech therapy

Module 3. Psychometric Techniques in Speech Therapy

- ♦ Apply psychometric techniques to assess the linguistic abilities of patients
- ♦ Use psychometric tools to design personalized intervention programs



The Virtual Campus will be available to you 24 hours a day, so you can access it at a time that best suits you" Enroll now!"

05

Career Opportunities

This revolutionary university program offers physicians a unique opportunity to update their knowledge of Speech Therapy and Language Diagnosis. Through a comprehensive focus on advanced techniques, graduates will be highly trained to diagnose, treat and rehabilitate Language Disorders. In this way, professionals will significantly improve the quality of life of patients and expand their professional opportunities in this specialized field.



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Do you want to train as a physician specialized in Applied Research in Speech Therapy? Achieve it through this university program in just 6 months"

Graduate Profile

Graduates of this TECH Postgraduate Diploma will be highly qualified to apply advanced techniques in the diagnosis and treatment of Language Disorders. At the same time, you will develop skills to design and implement innovative therapeutic approaches, conduct cutting-edge clinical research and lead multidisciplinary projects. In addition, you will be prepared to contribute to the advancement of speech therapy and improve clinical outcomes through evidence-based practice.

You will lead scientific research that will drive new diagnostic techniques in the field of speech therapy.

- ♦ **Assessment and Diagnosis of Language Disorders:** Ability to conduct thorough evaluations and accurate diagnoses of speech and language disorders using specialized tools and methods to identify patients' needs.
- ♦ **Effective Therapeutic Intervention:** Capacity to design and implement appropriate therapeutic intervention plans for treating speech and language disorders, improving communication and quality of life.
- ♦ **Use of Psychometric Tools:** Proficiency in the application and interpretation of psychometric tools in speech therapy, supporting the assessment and monitoring of progress in the treatment of language disorders.
- ♦ **Research in Speech Therapy:** Ability to design and carry out research in the field of speech therapy, using scientific methodologies to contribute to the advancement of knowledge and the improvement of therapeutic interventions.



After completing the program, you will be able to use your knowledge and skills in the following positions:

- 1. Physician Specialized in Language and Communication Disorders:** Responsible for diagnosing and treating conditions related to speech and language, collaborating with speech therapists and other professionals to develop effective treatment plans.
- 2. Specialist in Neurological Assessment of Language Disorders:** Expert in evaluating language disorders related to neurological conditions, using clinical and imaging tests to make accurate diagnoses and guide treatments.
- 3. Language Rehabilitation Consultant for Primary Care Centers:** Advisor on the implementation of language rehabilitation programs in primary care centers, collaborating with multidisciplinary teams to improve patient care for speech disorders.
- 4. Coordinator of Diagnostic and Treatment Programs for Speech Disorders:** In charge of coordinating medical and therapeutic teams for the evaluation, diagnosis, and treatment of speech disorders, ensuring continuity and integrity of patient care.
- 5. Physician Specialized in Language Neuropsychiatry:** Responsible for treating patients with language disorders stemming from neurological or psychiatric conditions, applying advanced knowledge in neuroscience and linguistics to develop personalized therapeutic strategies.
- 6. Expert in Research and Development of Treatments for Language Disorders:** Leader of clinical research projects focused on developing new therapies for language disorders, contributing to the creation of innovative, evidence-based treatments.
- 7. Physician in Education and Awareness of Language Disorders:** In charge of designing and leading educational programs aimed at both healthcare professionals and the general public, with the goal of raising awareness about language disorders and promoting early detection.
- 8. Physician Specialized in Language Disorders in Children and Adolescents:** Responsible for the evaluation and treatment of language disorders in children and adolescents, working in collaboration with parents and speech therapy teams to ensure proper language development.
- 9. Specialist in Rehabilitation of Language Disorders in Older Adults:** Specialist in the intervention and rehabilitation of language disorders in older adults, focused on improving their communication and quality of life through therapies adapted to their specific needs.



You will specialize in the rehabilitation of Language Disorders related to Neurological Diseases such as Dysarthria"

06

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

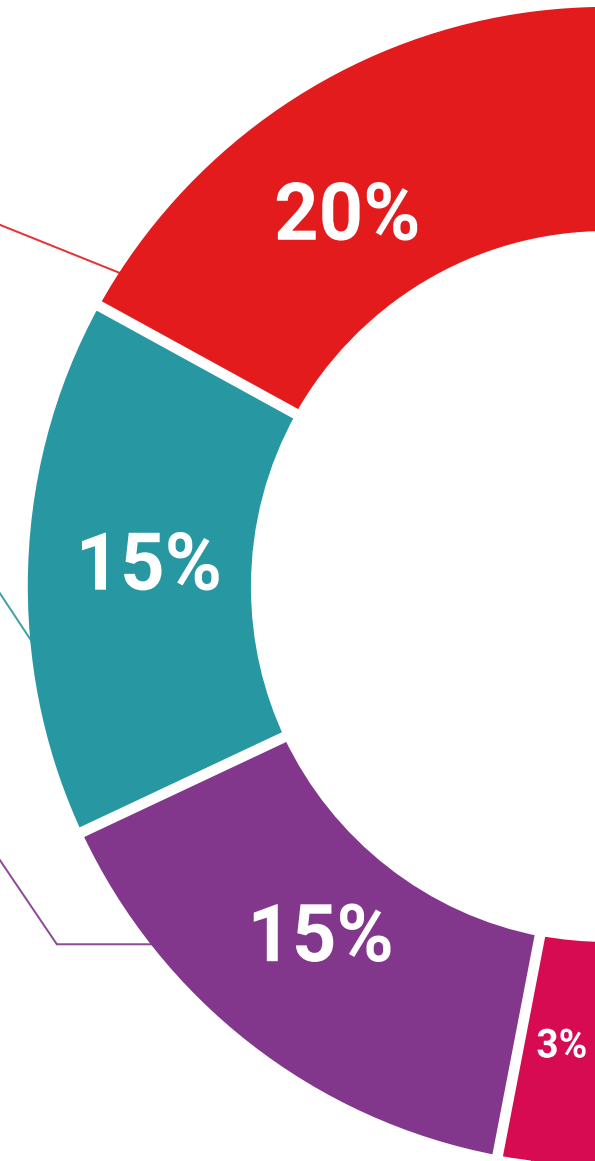
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

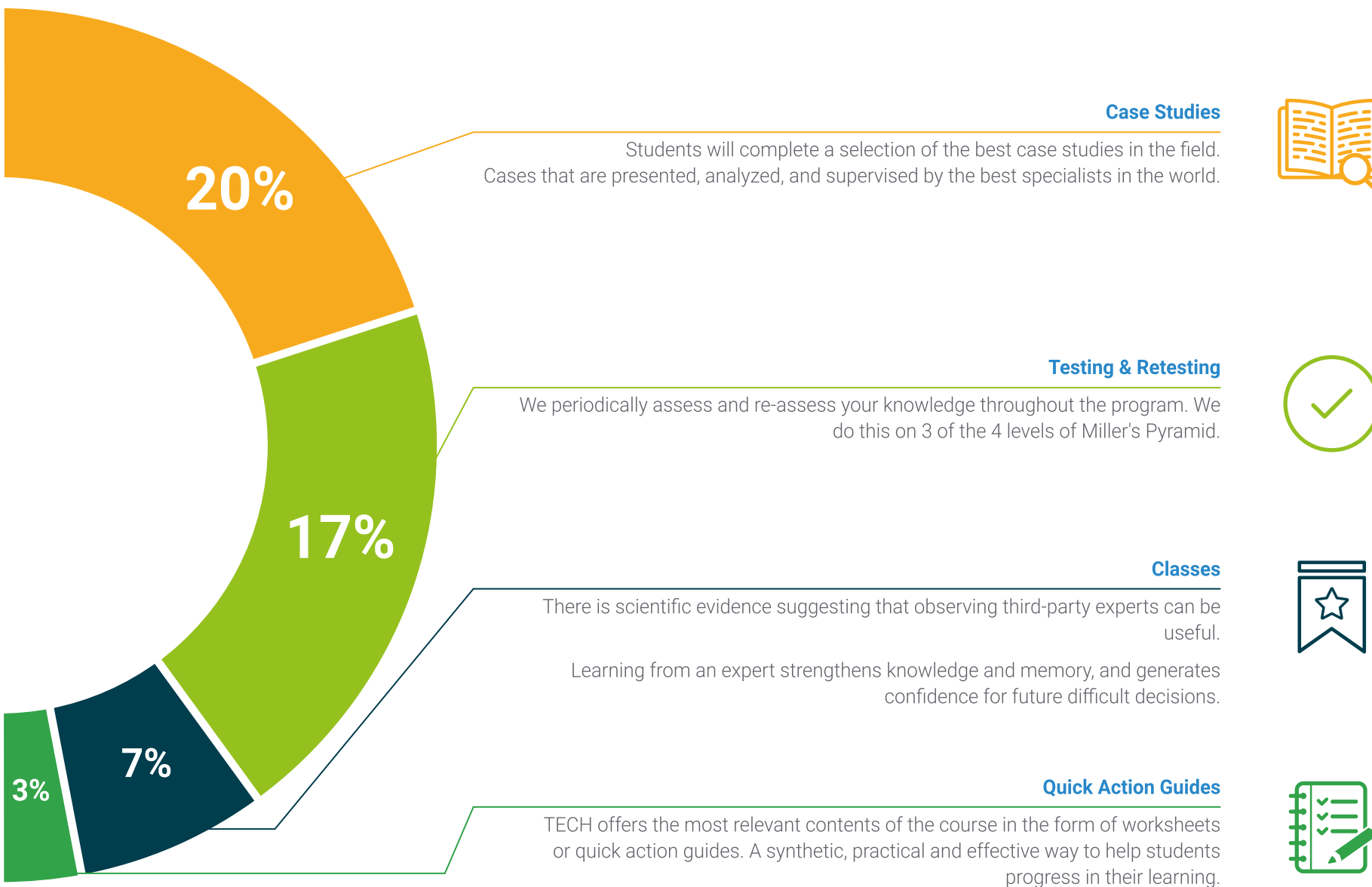
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





07 Certificate

This Postgraduate Diploma in Speech Therapy Research and Techniques 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.





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*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 Research and Techniques** 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 Research and Techniques**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**





Postgraduate Diploma
Speech Therapy Research
and Techniques

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Diploma

Speech Therapy Research and Techniques

