Postgraduate Certificate
Psychophysiology

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Postgraduate Certificate
Psychophysiology

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/psychology/postgraduate-certificate/psychophysiology**

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01

Introduction

Psychophysiology offers the psychology professionals many of the answers that the different mental pathologies pose in the transdiplomacy of their intervention. Knowing and controlling the premises of these data, becomes a capacity for growth and adequacy that can only be exercised by first level professionals. This Postgraduate Certificate is your opportunity to be one of them.

The working keys of psychophysiology, unraveled in a high level training course created for the most updated psychologist"

This Postgraduate Certificate provides extensive knowledge in advanced models and techniques in Psychophysiology. For this, you will have a teaching faculty that stands out for its extensive professional experience in the different fields in which psychology has developed and in different sectors of the population.

Throughout this program, you will learn the current and newest approaches on this topic. You will learn the most important clinical applications (anxiety, stress and psychophysiological disorders, neuropsychological disorders, sexual dysfunctions and deception detection).

We will not only take you through the theoretical knowledge we offer, but we will introduce you to another way of studying and learning, one which is simpler, more organic and more efficient. We will work to keep you motivated and to develop your passion for learning, helping you to analyze and to develop critical thinking skills.

A high-level step that will become a process of improvement, not only on a professional level, but also on a personal level.

This **Postgraduate Certificate in Psychophysiology** contains the most complete and up-to-date program on the market. The most important features include:

- The development of 100 case studies presented by experts in Physiology Applied to Psychology
- The graphic, schematic, and practical contents provide students with scientific and practical information on the disciplines that are essential for Psychologist
- New developments and innovations in the different areas of psychology
- Practical exercises where self-assessment can be used to improve learning
- Algorithm-based interactive learning system for decision-making in the situations that are presented to the student
- Special emphasis on cutting-edge 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

An educational program created for professionals who aspire for excellence, and that will enable you to acquire new skills and strategies easily and effectively"

Access to the deep knowledge of Psychophysiology, in a complete Postgraduate Certificate created to propel you to another professional level"

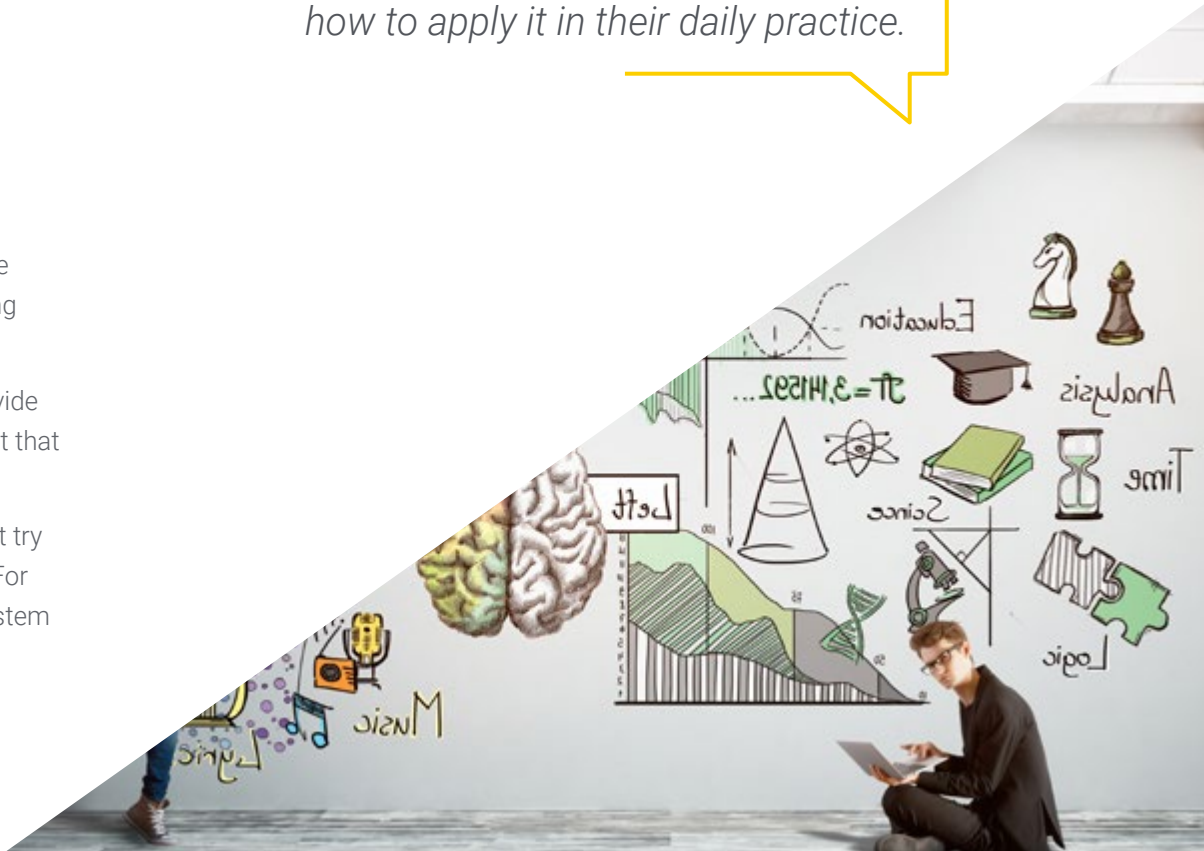
Increase your confidence as a psychologist, updating your knowledge through this Postgraduate Certificate.

This Certificate marks the difference between a professional with a lot of knowledge, and a professional who knows how to apply it in their daily practice.

It includes a very broad teaching staff made up of experts in psychology, who share their work experience in this program, as well as recognized specialists from leading communities 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 program designed to learn in real situations.

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



02

Objectives

The objectives of this program have been established as a guide for the development of the entire methodology, with the specific mission of offering the students a very intensive training that will really boost their professional progression. A journey of personal growth that will take you to the top in your intervention as a psychologist.

If your goal is to improve in your profession and acquire a qualification that will enable you to compete with the best, then look no further. This training will give your career the boost it needs"

General Objective

- Train professionals qualified to practice Physiology Applied to Psychology

Learn to interpret and understand the structures that determine the mental health of the individual and take a giant step forward in your profession"

Specific Objectives

- Learn the interrelationship between behavior and physiological aspects of the human being
- Understand the psychophysiological methods and techniques useful for the diagnosis, evaluation and treatment of physical and psychological disorders
- Analyze the physiological mechanisms of the organism that are linked to the psychological processes that accompany human behavior
- Learn the most important clinical applications (anxiety, stress and psychophysiological disorders, neuropsychological disorders, sexual dysfunctions and detection of deception)
- Describe the basic laws of different psychophysiological processes
- Identify the neurological and endocrine systems involved in cognitive and affective processes
- Analyze and critically judge scientific publications developed from the perspective of psychophysiology

03

Structure and Content

The contents of this comprehensive training program have been developed by the sector's most competent professionals, with a high quality criterion at every stage of the course For this purpose, the most relevant and comprehensive topics have been selected, with the latest and most interesting updates

This Postgraduate Certificate in Psychophysiology contains the most complete and up-to-date program on the market"

Module 1. Psychophysiology

1.1. Introduction to Psychophysiology
- 1.1.1. Definition and Characteristics of Psychophysiology
- 1.1.2. Basic Notions on Bioelectrical Signals
- 1.1.3. Recording and Analysis of Signals in Psychophysiology

1.2. Neuroimaging Techniques
- 1.2.1. Origin of EEG Signal
- 1.2.2. Mounting of Electrodes According to the International 10-20 System
- 1.2.3. Brain Activity and Frequency Analysis
- 1.2.4. Time Analysis (brain activity related to discrete events-PRADs or event-related potentials)
- 1.2.5. Exogenous, Mesogenic and Endogenous components
- 1.2.6. Positron Emission Tomography (TEP)
- 1.2.7. Technical Basis and Applications of PET
- 1.2.8. Technical Bases of Magnetic Resonance Imaging
- 1.2.9. Anatomical and Functional Magnetic Resonance Imaging

1.3. Nervous System
- 1.3.1. Striated Musculature: Recording and Analysis
- 1.3.2. Electrooculogram (EOG) Recording and Analysis
- 1.3.3. Electromyogram (EMG) Recording and Analysis
- 1.3.4. Recording and Analysis of Respiratory Activity
- 1.3.5. Autonomic Nervous System: Features
- 1.3.6. Electrodermal Skin Activity, Recording and Analysis
- 1.3.7. Cardiovascular Activity, Physiological Aspects and Recordings

1.4. Psychophysiology of Attention
- 1.4.1. Passive or Automatic Attention: the orienting response (OR) peripheral changes associated with OR, components of PRADs related to passive attention: N1, MMN and P3a
- 1.4.2. Selective Attention: expectancy-related selective attention, E1-E2 task, peripheral changes and Contingent Negative Variation

1.5. Psychophysiology of Executive Functions
- 1.5.1. Definition and Models
- 1.5.2. Biological Principles of Executive Functions
- 1.5.3. Inhibition - Psychophysiology and Neuroimaging
- 1.5.4. Working Memory - psychophysiology and neuroimaging
- 1.5.5. Mental Flexibility - psychophysiology and neuroimaging

1.6. Psychophysiology of Memory
- 1.6.1. Neurophysiological Basis of Short-Term and Working Memory
- 1.6.2. Consolidation of Long-Term Information, Neurophysiological Basis
- 1.6.3. Neurological Bases of Long-Term Memory Systems: episodic, semantic and procedural memory

1.7. Psychophysiology of Language
- 1.7.1. Neurological Basis of Language: lateralization, aphasias, neurological basis of reading
- 1.7.2. Peripheral Psychophysiological Measures for the Study of Language Processing: recording of eye movements
- 1.7.3. Visual Word Recognition: reflexes in PRADs
- 1.7.4. Sentence Comprehension: reflex in the PRADs

1.8. Affective Psychophysiology
- 1.8.1. Introduction
- 1.8.2. The Discrete Model, Basic Emotions and their Facial Expression The Dimensional Approach: valence and arousal
- 1.8.3. Peripheral Physiological Responses and Dimensions of Valence and Arousal
- 1.8.4. Brain activity in emotional processing: brain circuits of emotions
- 1.8.5. Hemispheric asymmetry in emotional processing

1.9. Psychophysiology of Stress and Anxiety
- 1.9.1. Basic Concepts of Stress
- 1.9.2. Effect of stress on the endocrine systems
- 1.9.3. Effect of stress on the immune system: changes in the immune system during chronic stress
- 1.9.4. Effects of stress at the physiological level
- 1.9.5. Effects of stress on cognitive processing
- 1.9.6. Psychophysiology of Anxiety
- 1.9.7. Epidemiology, clinical, categories of anxiety
- 1.9.8. Peripheral physiological activation
- 1.9.9. Endocrine activity: the Hypothalamus-Pituitary-Adrenal axis
- 1.9.10. Attentional Biases
- 1.9.11. Brain activity in the anxiety response

1.10. Psychophysiology of depression and psychophysiology of schizophrenia
- 1.10.1. Psychophysiology of Depression
- 1.10.2. Hypotheses about the pathophysiological mechanisms
- 1.10.3. Brain and peripheral activity in depression
- 1.10.4. Psychophysiology of Schizophrenia
- 1.10.5. Epidemiology, clinical and symptoms of schizophrenia
- 1.10.6. The dopaminergic system and its link to schizophrenia
- 1.10.7. Alterations in psychophysiological and neuroimaging responses

Our syllabus has been designed with teaching efficiency in mind: so that you learn faster, more efficiently and on a more permanent basis"

04

Methodology

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

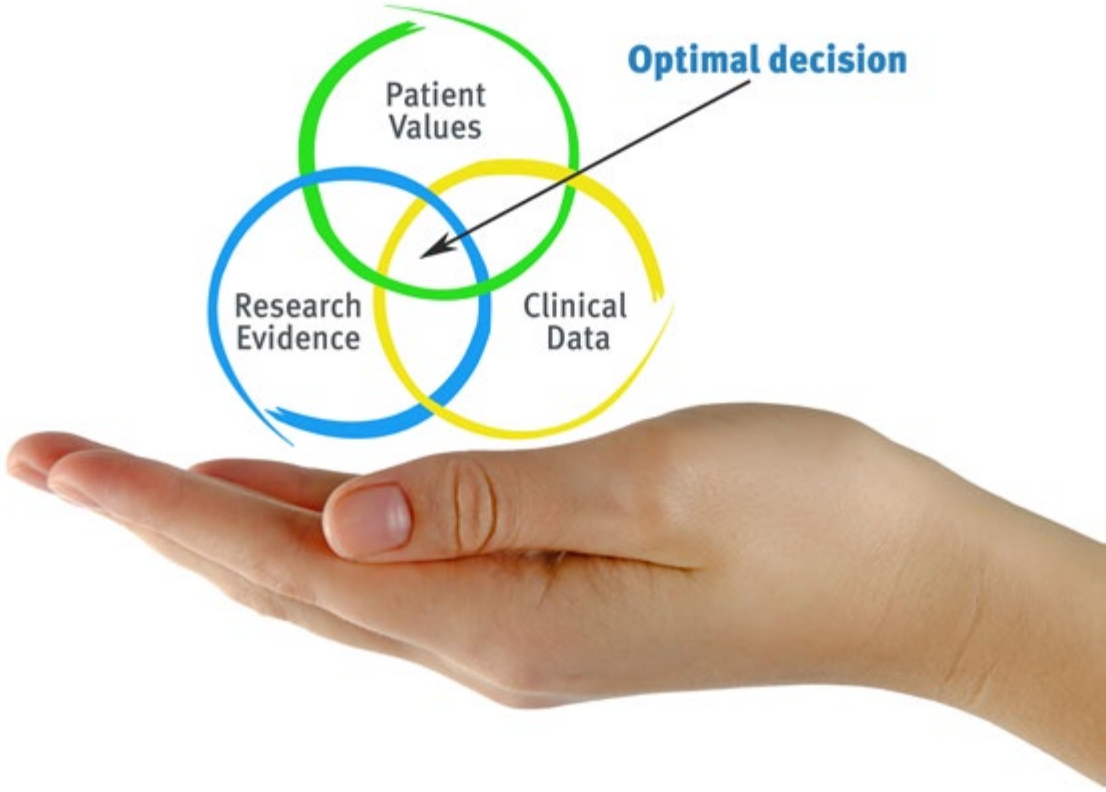
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH the psychologist experiences a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the psychologist's professional practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

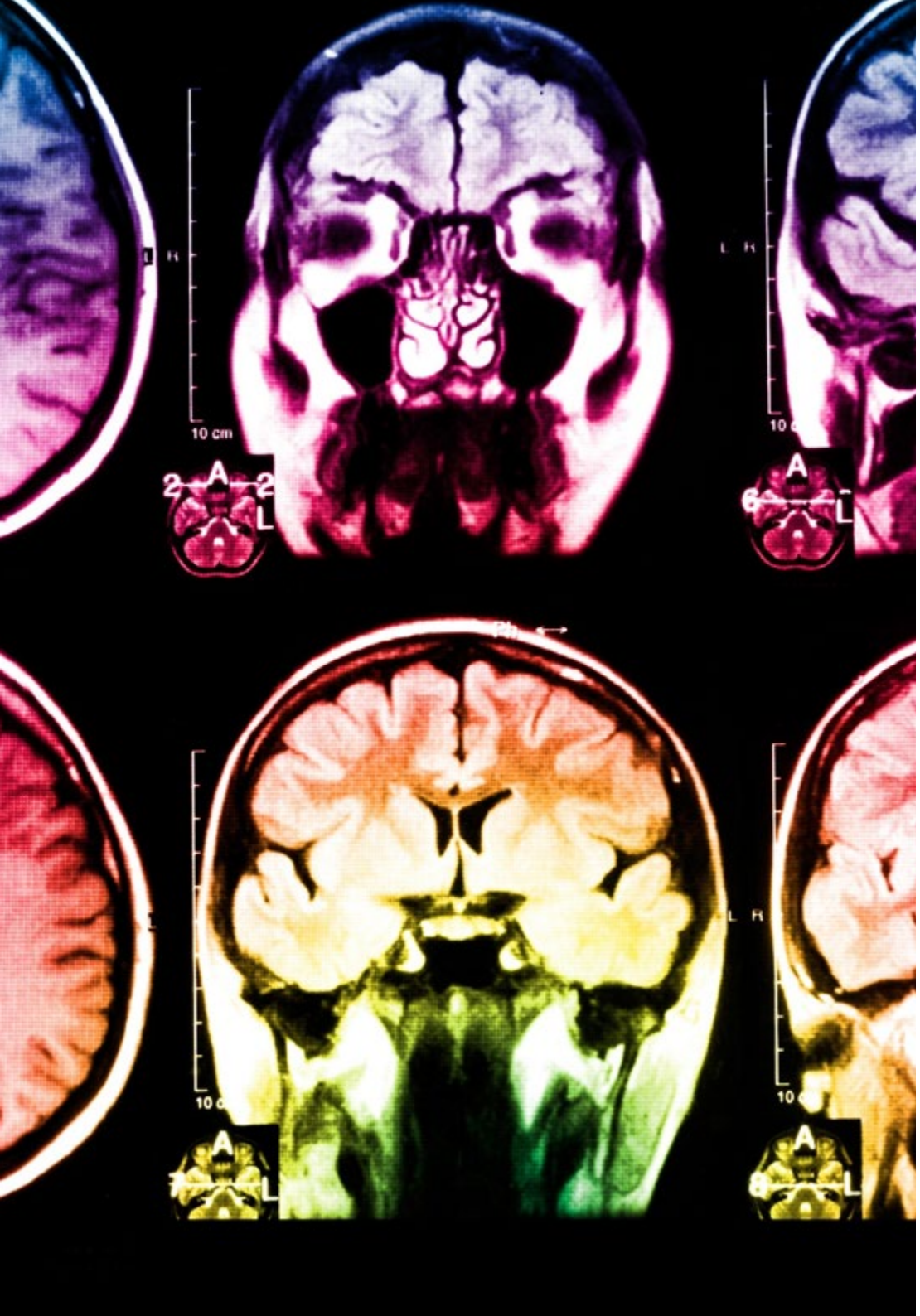
1. Psychologists who follow this method not only master the assimilation of concepts, but also develop their mental capacity by means of exercises to evaluate real situations and apply their knowledge.
2. Learning is solidly translated into practical skills that allow the psychologist to better integrate knowledge into clinical practice.
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.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The psychologist will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

This methodology has trained more than 150,000 psychologists with unprecedented success in all clinical specialties. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:

Study Material

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

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current psychology. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

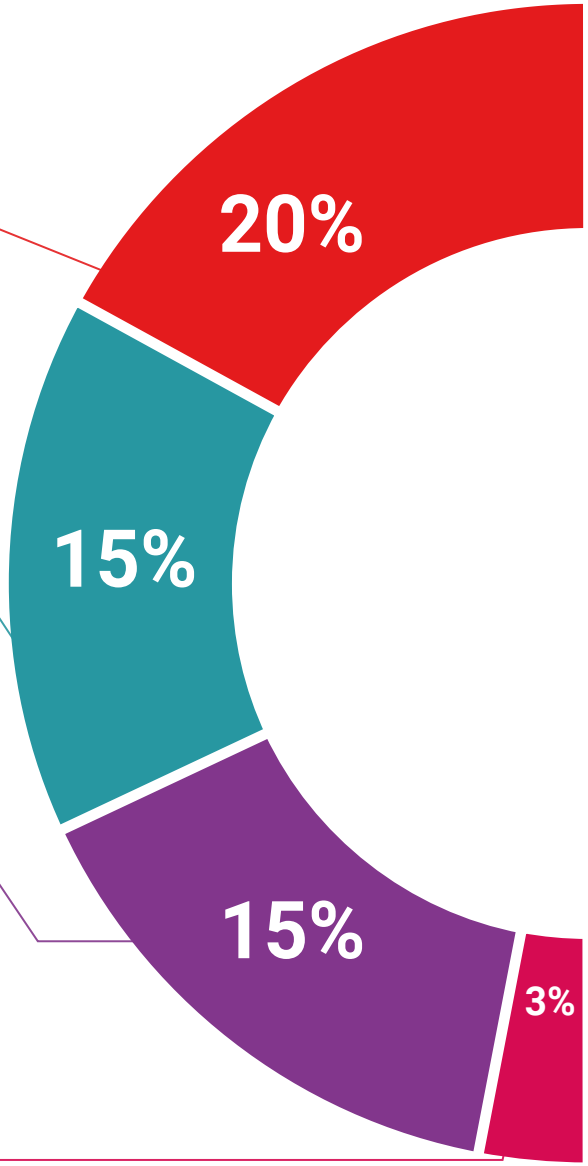
Interactive Summaries

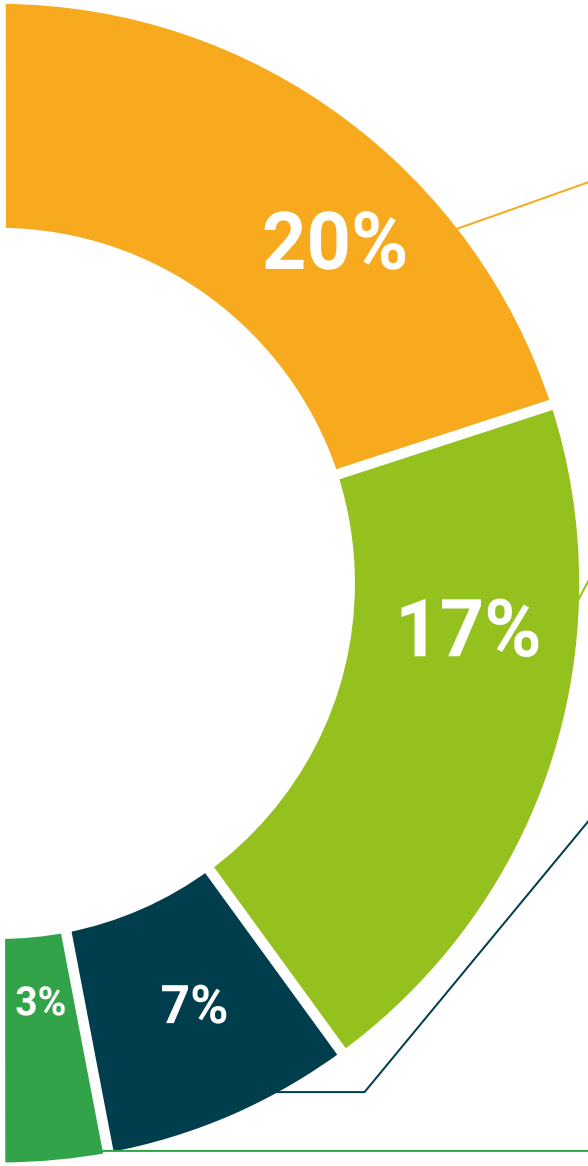
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

05

Certificate

The Postgraduate Certificate in Psychophysiology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

Include in your training a Postgraduate Certificate in Psychophysiology: A huge step forward in your competitiveness in the sector"

This **Postgraduate Certificate in Psychophysiology** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Psychophysiology**

Official Nº of Hours: **150 h.**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Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Psychophysiology

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

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 EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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