

# Postgraduate Certificate Psychometry



## Postgraduate Certificate Psychometry

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/psychology/postgraduate-certificate/psychometry](http://www.techtitute.com/us/psychology/postgraduate-certificate/psychometry)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Structure and Content

---

*p. 12*

04

Methodology

---

*p. 16*

05

Certificate

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*p. 24*

# 01

# Introduction

Psychometrics has advanced very intensively in recent times. The preponderance of psychological intervention has driven new and avant-garde measurement and assessment systems. This intensive course of high quality will allow you to learn the latest techniques and innovations in the field, in a practical and rigorous way, thanks to the online mode with which it has been conceived.





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*The most advanced and efficient techniques in psychometrics, in a course created for professionals who seek excellence in their profession”*

This course provides extensive knowledge in advanced models and techniques in Psychometrics Applied to the Psychological Field. 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 to design, adapt, validate and contrast evaluation instruments; to analyze and interpret evaluation results, as well as to deepen in the most relevant methodological advances for the analysis of significant change in studies on social, clinical or educational intervention programs.

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 Psychometry** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of 100 practical cases presented by experts
- ♦ 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 the self-assessment process can be carried out 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



*A program created for professionals who aspire to excellence and that will allow you to acquire new skills and strategies in a smooth and effective way”*

“ Access to the deep knowledge of Psychometry and its multiple implications, in a complete course created to propel you to another professional level”

The most effective study support systems on the teaching scene will be your tools for professional growth, with this complete course.

This course makes the difference between a knowledgeable professional and a truly competent and efficient professional.

It includes a very broad teaching staff of professionals belonging to the field of psychology, who pour into this educational program the experience of their work, in addition to recognized specialists of reference societies and prestigious universities

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide 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

This course program is oriented so that the psychologist can acquire the necessary tools to develop in the specific area, knowing the latest trends and deepening in those issues that make up the forefront of this area of knowledge.





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*This training will put you at the forefront of the profession and will give your resume the boost it needs”*



## General Objective

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- ◆ Train professionals qualified to practice Psychometry

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*Master the new techniques and methods of psychometrics and apply them in your work from the very first moment”*





## Specific Objectives

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- ◆ Be able to describe and measure variables
- ◆ Be able to identify differences, problems and needs
- ◆ Learn how to design and adapt evaluation instruments
- ◆ Learn how to validate and contrast evaluation instruments
- ◆ Understand how to analyze and interpret the results of the evaluation
- ◆ Design, adapt, validate and contrast evaluation instruments
- ◆ Analyze evaluation results and interpret evaluation results

03

# Structure and Content

The structure of the contents has been designed by a team of professionals in Psychometrics, aware of the relevance of current training in order to deepen the area of knowledge and make publications of academic quality.



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*This Online Course in Psychometry  
contains the most complete and up-to-date  
scientific program in the market”*

## Module 1. Psychometry

- 1.1. General Introduction to Psychometry
  - 1.1.1. Theory of measurement
  - 1.1.2. Theory of measurement scales
  - 1.1.3. Axiomatic approach
  - 1.1.4. Psychophysical scaling
  - 1.1.5. Psychological scaling
  - 1.1.6. Test theory
  - 1.1.7. Classical Test Theory
  - 1.1.8. Item response theory
  - 1.1.9. Multivariate techniques
- 1.2. Test construction
  - 1.2.1. Psychometric schools
  - 1.2.2. Functionalist approach
  - 1.2.3. Trait approach
  - 1.2.4. Identification of the purpose of the test
- 1.3. Test planning
  - 1.3.1. External contextual factors
  - 1.3.2. Internal test attributes
  - 1.3.3. Domain definition
  - 1.3.4. Type of support
  - 1.3.5. Item construction
  - 1.3.6. Response format
  - 1.3.7. Rules for item wording
  - 1.3.8. Quantification of responses
- 1.4. Analysis of test items
  - 1.4.1. Difficulty index
  - 1.4.2. Homogeneity index
  - 1.4.3. Validity index
  - 1.4.4. Analysis of incorrect alternatives
  - 1.4.5. Correction of chance effects



- 1.5. Classical linear model
  - 1.5.1. Fundamental Assumptions of IRT
  - 1.5.2. Concept of parallel forms
  - 1.5.3. Reliability coefficient
  - 1.5.4. Reliability of a test made up of n parallel forms
- 1.6. Credibility
  - 1.6.1. Reliability as correlation between parallel forms
  - 1.6.2. Temporal stability
  - 1.6.3. Internal Consistency
  - 1.6.4. Measurement Errors
  - 1.6.5. Reliability coefficient of the differences
  - 1.6.6. Estimation of true scores
  - 1.6.7. Contrast on true scores
  - 1.6.8. Factors affecting test reliability
  - 1.6.9. Generalizability theory
- 1.7. Validity
  - 1.7.1. Content Validity
  - 1.7.2. Predictive validity
  - 1.7.3. Construct Validity
  - 1.7.4. Factorial construct validity
  - 1.7.5. The factorial model with one factor
  - 1.7.6. The factorial model with two factors
  - 1.7.7. Convergent-discriminant validity
- 1.8. Test scoring
  - 1.8.1. Centiles or percentiles
  - 1.8.2. Standardized typical scores
  - 1.8.3. Derived typical scores
  - 1.8.4. Chronological scales
- 1.9. Item response theory
  - 1.9.1. IRT Assumptions
  - 1.9.2. Item characteristic curve
  - 1.9.3. Unidimensionality
  - 1.9.4. Local independence
  - 1.9.5. Logistic models: one, two and three parameters
  - 1.9.6. Model testing
  - 1.9.7. Information function
  - 1.9.8. Applications
- 1.10. Ethical and deontology aspects
  - 1.10.1. General Rules
  - 1.10.2. Ethical and deontological principles of psychological assessment
  - 1.10.3. Use of tests
  - 1.10.4. Training of users
  - 1.10.5. Computerized tests
  - 1.10.6. Translation-adaptation of tests
  - 1.10.7. Criterion-referenced tests
  - 1.10.8. Test preparation
  - 1.10.9. Use of the data



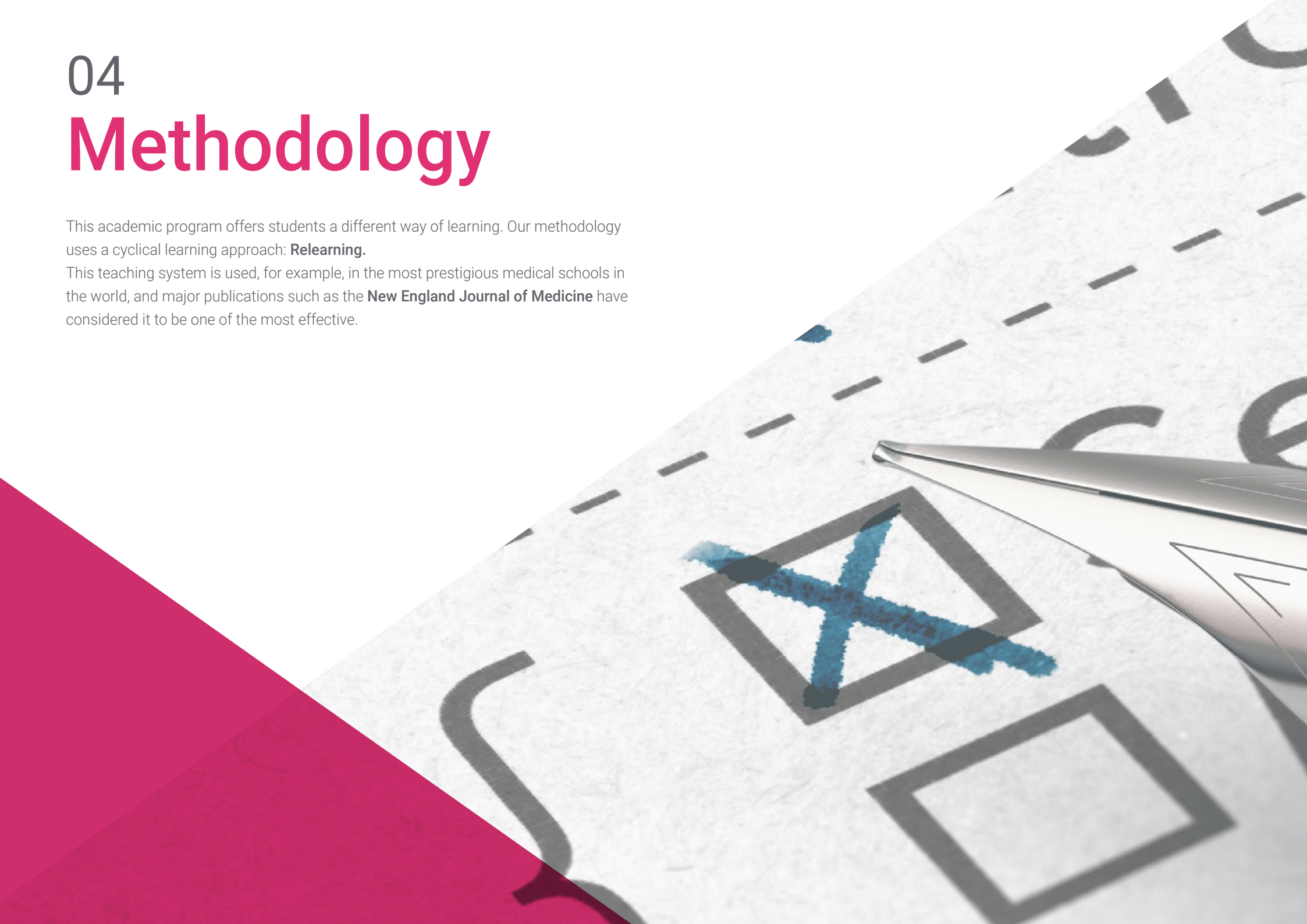
*Our syllabus has been designed with teaching effectiveness in mind: so that you learn faster, more efficiently, and on a more permanent basis”*

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.





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*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.

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*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 180,000 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 Psychometry guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 program will allow you to obtain your **Postgraduate Certificate in Psychometry** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (**official bulletin**). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

Title: **Postgraduate Certificate in Psychometry**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present quality

online training

development languages

virtual classroom

**tech** global  
university

## Postgraduate Certificate Psychometry

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- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
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## Psychometry