



# Postgraduate Certificate Biochemistry and Neuroanatomy of the Most Common Mental Disorders for Teachers

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 4 ECTS

» Schedule: at your own pace

» Exams: online

 $We bsite: {\color{blue}www.techtitute.com/us/education/postgraduate-certificate/biochemistry-neuroanatomy-most-common-mental-disorders-teachers}$ 

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For teachers, recognizing how biochemistry and neuroanatomy affect mental development is a fundamental skill that will provide them with the ability to intervene in a way that is both appropriate and effective for students' needs. Understanding these aspects of neuropsychology will enable them to determine the necessary approach to provide the best development opportunities. This Postgraduate Certificate will quickly and efficiently equip you in this field.



## tech 06 | Introduction

This Postgraduate Certificate provides you with the necessary knowledge to understand, from the teaching perspective, everything related to the biological and neurological processes that explain mental illness.

This knowledge forms the foundation for appropriate competence in dealing with mental illness within the school context.

From a scientific point of view, nothing is more fundamental in determining whether a working model is suitable than relating it to the neurobiological knowledge of the brain. Therefore, this Postgraduate Certificate offers a scientific foundation that demonstrates whether models are supported by their assumptions, giving you the momentum that the current educational system needs.

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Update your knowledge through the
Postgraduate Certificate in Biochemistry
and Neuroanatomy of the Most Common
Mental Disorders and enhance your teaching
competence with an additional skill that will
place you at the forefront of excellence"

This Postgraduate Certificate in Biochemistry and Neuroanatomy of the Most Common Mental Disorders for Teachers contains the most complete and up-to-date educational program on the market. The most important features include:

- Development of more than 75 clinical cases presented by experts
- 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
- New diagnostic and therapeutic developments in the assessment, diagnosis and intervention of the biological and neurological processes that explain mental illness
- It contains practical exercises where the self-assessment process can be carried out to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- With special emphasis on evidence-based psychology and research methodologies in psychology
- All of this will be complemented by 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



Incorporate the analytical and recognition skills of a specialist in the context of mental illness in the classroom, using the most relevant tools in neuropsychology"

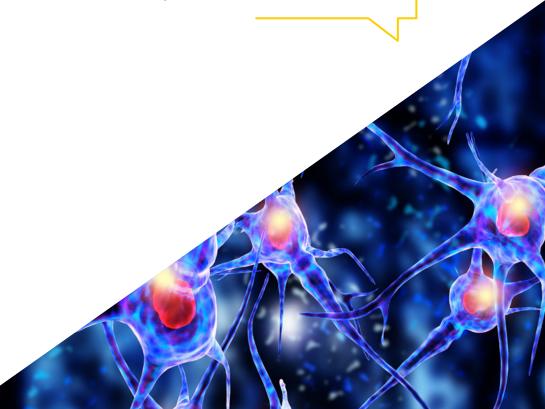
The program includes faculty members from the field of Psychology, who bring their professional experience into this course, along with recognized specialists from leading scientific societies.

Thanks to its multimedia content, developed with the latest educational technology, professionals will benefit from situated and contextual learning—simulated environments designed to provide immersive learning experiences that prepare them for real-life situations

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. To assist with this, the professional will have the support of an innovative interactive video system created by recognized experts in the field of clinical neuropsychology, with extensive teaching experience.

A course designed with the best educational materials for online preparation, which will become a process of professional growth of the highest interest for educators.

Take advantage of the opportunity to learn about and improve the care of students who require specific attention in this area.







## tech 10 | Objectives



## **General Objectives**

- Enhance understanding of the overall functioning of the brain, as well as the knowledge of biochemistry that activates or inhibits it
- Manage brain activity as a map of mental disorders
- Describe the brain-mind relationship
- Develop technologies that induce changes in the brain to overcome mental illness
- Describe the most common neurological disorders seen in psychological consultations



Gain deep understanding of mental disorders and how they affect brain development in a top-quality Postgraduate Certificate"





## **Specific Objectives**

- Identify the biological foundations of behavior
- Learn phylogeny from cerebral ontogeny
- Manage the neurological and biochemical framework in the overall context of human behavior
- Develop models that understand mental health and mental illness from brain activity
- Understand and master the specific biochemical and anatomical activity associated with each mental disorder
- Gain mastery of the biochemical antagonists and agonists affecting global brain function
- Acquire pharmacological knowledge for the treatment of mental illness
- Develop skills in designing psychological models that help improve biochemical and anatomical imbalances
- Engage in multidisciplinary intervention in mental disorders
- Discover how psychosocial elements translate into brain activity and, consequently, intervention in mental illness

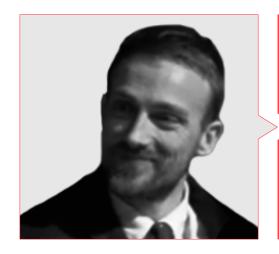






## tech 14 | Course Management

#### Management



#### Dr. Martínez Lorca, Alberto

Specialist in Nuclear Medicine. Rey Juan Carlos University Hospital - Quirón. Madrid. Spain

#### Coordinator



## Dr. Aguado Romo, Roberto

- Psychologist specialized in clinical psychology
- European specialist psychologist in psychotherapy
- Managing Director of evaluation and psychotherapy centers in Madrid, Bilbao, and Talavera de la Reina
- · Author of Time-Limited Psychotherapy
- Researcher at CerNet, Emotional Network, and European Institute for Time-Limited Psychotherapies

#### **Teachers**

#### Fernández, Ángel

- European specialist psychologist in Psychotherapy from the EFPA
- Health Psychologist. Master's Degree in Clinical and Health Psychology
- Director of the Evaluation and Psychotherapy Center of Madrid
- Tutor in charge of the Psychodiagnosis and Psychological Intervention area of the CEP
- Author of the T.E.N. technique
- Head of studies on the Master's Degree in Time-Limited Psychotherapy and Health Psychology
- Specialist in Clinical Hypnosis and Relaxation

#### Ms. González, Mónica

- Psychologist in charge of the Department of Child and Adolescent Psychology in the Quirón Hospital and Avatar Psychologists in Marbella
- Master's degree in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapy
- Kaisser, Carlos. M.D. Otolaryngologist
- Head of the Otolaryngology department at Segovia General Hospital
- Member of the Royal Academy of Medicine of Salamanca
- Master's Degree in Time-Limited Psychotherapy and Health Psychology
- Expert in Psychosomatic Medicine

#### Ms. Martínez-Lorca, Manuela

- Doctorate in Psychology from the University of Castilla-La Mancha
- Health Psychologist
- Lecturer in the Department of Psychology at the UCLM. Master in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapies
- Specialist in Clinical Hypnosis and Relaxation

#### Ms. Roldan, Lucia

- Health Psychologist
- Cognitive-behavioral intervention specialist
- Master's Degree in Time-Limited Psychotherapy and Health Psychology
- Expert in energy therapy intervention

04 **Structure and Content** 

The approach to this specialization has been designed with the excellence criteria of our university in mind. With a stimulating and comprehensive development, this preparatory journey will allow you to learn in a dynamic and continuous manner, helping you achieve your goals with ease and efficiency.



## tech 18 | Structure and Content

# **Module 1.** Biochemistry and Neuroanatomy of the Most Common Mental Disorders in the Psychologist's Outpatient Clinic

- 1.1. Neuroanatomy and Biochemistry in Consciousness and Memory Disorders
  - 1.1.1. Hypervigilance, Obnubilation, Confusional or Twilight States
  - 1.1.2. Depersonalization or Derealization Disorders
  - 1.1.3. Remote or Immediate Memory Disorders
  - 1.1.4. Clinical Disorientation, Drowsiness
  - 1.1.5. Obnubilation, Stupor, Delirium, Coma, Twilight State
  - 1.1.6. Clinical Agnosia, Anosoagnosia, Apraxia, Adiadocokinesia
  - 1.1.7. Memory Disorders: Amnesia, Paramnesia, Amnesic Screen, Lethologic
- 1.2. Neuroanatomy and Biochemistry of Anxiety Disorders
  - 1.2.1. Panic Attacks
  - 1.2.2. Agoraphobia
  - 1.2.3. Simple Phobia
  - 1.2.4. Generalized Anxiety Disorder
  - 1.2.5. Obsessive Compulsive Disorder
  - 1.2.6. Social Phobia
  - 1.2.7. Post-Traumatic Stress Disorder
- 1.3. Neuroanatomy and Biochemistry of Mood Disorders
  - 1.3.1. Dysthymia
  - 1.3.2. Sever Depression
  - 1.3.3. Adaptive Deficit Disorders
- 1.4. Neuroanatomy and Biochemistry of Eating Disorders
  - 1.4.1. Pica
  - 1.4.2. Rumination Disorder
  - 1.4.3. Anorexia Nervosa
  - 1.4.4. Bulimia Nervosa
  - 1.4.5. Binge Eating Disorder





## Structure and Content | 19 tech

- 1.5. Neuroanatomy and Biochemistry of Impulse Control Disorders
  - 1.5.1. Oppositional Defiant Disorder
  - 1.5.2. Intermittent Explosive Disorder
  - 1.5.3. Antisocial Personality Disorder
  - 1.5.4. Behavioral Disorders
  - 1.5.5. Kleptomania
  - 1.5.6. Pyromania
- 1.6. Neuroanatomy and Biochemistry of Sleep Disorders
  - 1.6.1. Insomnia
  - 1.6.2. Hypersomnia
  - 1.6.3. Narcolepsy
  - 1.6.4. Apnea
  - 1.6.5. Circadian Rhythm Disorders
  - 1.6.6. Restless Leg Syndrome
- 1.7. Neuroanatomy and Biochemistry of Personality Disorders
  - 1.7.1. Borderline Personality Disorder
  - 1.7.2. Schizoid Personality Disorder
  - 1.7.3. Avoidant Personality Disorder
  - 1.7.4. Narcissistic Personality Disorder
  - 1.7.5. Obsessive Compulsive Personality Disorder
- 1.8. Neuroanatomy and Biochemistry of Psychotic Disorders
  - 1.8.1. Schizophrenia
  - 1.8.2. Delirious Disorders
  - 1.8.3. Bipolar Disorder
  - 1.8.4. Psychotic Disorder





#### 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.









#### 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"

## tech 24 | Study Methodology

#### 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.



## tech 26 | Study Methodology

#### 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.

## Study Methodology | 27 tech

#### 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.

## tech 28 | Study Methodology

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.







## tech 32 | Diploma

This private qualification will allow you to obtain a diploma for the **Postgraduate**Certificate in Biochemistry and Neuroanatomy of the Most Common Mental Disorders for Teachers 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 Certificate in Biochemistry and Neuroanatomy of the Most Common Mental Disorders for Teachers

Modality: online

Duration: 6 weeks

Accreditation: 4 ECTS



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

## Postgraduate Certificate in Biochemistry and Neuroanatomy of the Most Common Mental Disorders for Teachers

This is a private qualification of 120 hours of duration equivalent to 4 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



health

guarantee

technology

technology

university

## Postgraduate Certificate

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