

Postgraduate Certificate

Instrumental Techniques in the Clinical Analysis Laboratory





Postgraduate Certificate

Instrumental Techniques in the Clinical Analysis Laboratory

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/instrumental-techniques-clinical-analysis-laboratory

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01

Introduction

In this complete Postgraduate Certificate, we offer you the possibility of updating your knowledge in clinical analysis laboratory work and, specifically, in the instrumental techniques that are performed in it. Through the most developed teaching techniques, you will learn the theory and practice of all the advances needed to work in a clinical analysis laboratory at a high level. With a structure and plan that is totally compatible with your personal and professional life.



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A complete Postgraduate Certificate that will teach you the instrumental techniques that make up the clinical analysis laboratory"

The clinical professional will achieve, with the study of this Postgraduate Certificate, excellence in the knowledge of instrumental techniques and sample collection techniques, as the basis of analytical methodology, one of the fundamental points of their expertise as specialists in the area. Upon completing this course, the professional will have gained an understanding of instrumental techniques and their management, being equipped with specialized skills in order to perform these tasks in the laboratory.

The skills that the student must acquire in order to be qualified as an expert in Clinical Analysis and develop their work in a laboratory of this kind are:

- ♦ Select, recommend, take samples and perform the most appropriate laboratory procedures to study the patient's situation, ensuring the collection of quality-assured and cost-optimal results.
- ♦ Interpret the results obtained in relation to the clinical situation of the patient, by passing this information on to the clinicians.
- ♦ Gain specialized knowledge focused on the clinical usefulness of laboratory procedures, evaluating and maintaining the quality of available methods and designing and implementing new analytical methods.

A compendium and deepening of knowledge that will lead you to excellence in your profession.



With this Postgraduate Certificate you will be able to combine a high intensity specialization with your professional and personal life, achieving your goals in a simple and real way"

This **Postgraduate Certificate in Instrumental Techniques in the Clinical Analysis Laboratory** offers you the advantages of a high-level scientific, teaching and technological course. These are some of its most notable features:

- ♦ The latest technology in online teaching software
- ♦ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ♦ Practical cases presented by practising experts
- ♦ State-of-the-art interactive video systems.
- ♦ Teaching supported by telepractice
- ♦ Continuous updating and recycling systems
- ♦ Autonomous learning: full compatibility with other occupations
- ♦ Practical exercises for self-evaluation and learning verification
- ♦ Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- ♦ Communication with the teacher and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an Internet connection
- ♦ Complementary documentation banks permanently available, even after the Postgraduate Certificate

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A highly qualified Postgraduate Certificate that will allow you to become one of the best specialized professionals in the clinical analysis laboratory"

The teachers of this Postgraduate Certificate are professionals currently working in a modern and accredited Clinical Laboratory, with a very solid training base and up to date knowledge in both scientific and purely technical disciplines.

In this way we ensure that we deliver the educational update we are aiming for. A multidisciplinary team of professionals trained and experienced in different environments, who will cover the theoretical knowledge in an efficient way, but, above all, will put the practical knowledge derived from their own experience at the service of the course: one of the differential qualities of this course.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate in Instrumental Techniques in the Clinical Analysis Laboratory. Developed by a multidisciplinary team of experts, who integrate the latest advances in educational technology. In this way, you will be able to study with a range of easy-to-use and versatile multimedia tools that will give you the necessary skills you need for your specialization.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as an eminently practical process. To achieve this remotely, we will use telepractice: with the help of an innovative interactive video system and Learning from an Expert you will be able to acquire the knowledge as if you were facing the scenario you are learning at that moment. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

The learning of this Postgraduate Certificate is developed through the most advanced didactic methodology in online teaching to guarantee that your effort will have the best possible results.

Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents: "Learning from an Expert"



02 Objectives

The objective of this training is to offer professionals who work in clinical analysis laboratories, the necessary knowledge and skills to perform their duties using the most advanced protocols and techniques of the moment. Through a study plan totally adapted to the student, this Postgraduate Certificate will progressively allow you to acquire the skills that will push you towards a much higher professional level.





“

A Postgraduate Certificate focused on achieving the necessary skills in order to carry out the instrumental techniques of a laboratory with the solvency of an expert”



General Objectives

- ♦ Analyze and carry out the instrumental techniques and sample collection processes that specifically apply to medical clinical analysis laboratories as well as understanding the basics and the correct management of the necessary instruments.
- ♦ Apply the instrumental techniques in the resolution of problems in health analysis.
- ♦ Gain specialized knowledge to carry out the tasks specific to a clinical analysis laboratory in terms of the implementation of new analytic methods and the monitoring the quality of those already implemented.
- ♦ Define the procedures used in clinical analysis laboratories for the use of different techniques as well as for sample collection and those aspects related to validation, calibration, automatization and processing of the information obtained from the procedures.





Specific Objectives

- ◆ Compile the instrumental techniques used in a clinical analysis laboratory.
- ◆ Determine the procedures involved in microscopic, microbiological, spectral, molecular biology, separation and cell counting techniques.
- ◆ Develop the fundamental theoretical concepts for the comprehension of instrumental techniques
- ◆ Establish the direct applications of instrumental techniques of clinical analysis in human health as a diagnostic and preventive element.
- ◆ Analyze the necessary process prior to the use of instrumental techniques that should be developed in the clinical analysis laboratory.
- ◆ Justify the rationale for using one practice over another based on diagnostic, staffing, management and other factors.
- ◆ Propose a practical learning of instrumental techniques through the use of clinical cases, practical examples and exercises.
- ◆ Evaluate the information obtained from the use of instrumental techniques for the interpretation of results.



A boost to your CV that will give you the competitiveness of the best prepared professionals in the labor market"

03

Course Management

For our course to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.



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An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your training: a unique opportunity not to be missed”

International Guest Director

Jeffrey Jhang, M.D. is a dedicated expert in Clinical Pathology and Laboratory Medicine. He has won several awards in these areas, including the Dr. Joseph G. Fink Award from the Columbia University College of Medicine and Surgery, among other recognitions from the College of American Pathologists.

His scientific leadership has been latent thanks to his exhaustive work as Medical Director of the Clinical Laboratory Center, attached to the Icahn School of Medicine at Mount Sinai. At the same institution, he coordinates the Department of Transfusion Medicine and Cell Therapy. In addition, Dr. Jhang has held management positions in the Clinical Laboratory at the Langone Health Center of New York University and as Chief of the Laboratory Service at Tisch Hospital.

Through these experiences, the expert has mastered different functions such as the supervision and management of laboratory operations, complying with the main regulatory standards and protocols. In turn, he has collaborated with interdisciplinary teams to contribute to the accurate diagnosis and care of different patients. On the other hand, he has spearheaded initiatives to improve the quality, performance and efficiency of analytical technical facilities.

At the same time, Dr. Jhang is a prolific academic author. His articles are related to scientific research in different health fields ranging from Cardiology to Hematology. In addition, he is a member of several national and international committees that outline regulations for hospitals and laboratories around the world. He is also a regular speaker at congresses, a guest medical commentator on television programs and has participated in several books.



Dr. Jhang, Jeffrey

- Director of Clinical Laboratories at NYU Langone Health, New York, United States
- Director of Clinical Laboratories at NYU Tisch Hospital, New York
- Professor of Pathology at the NYU Grossman School of Medicine
- Medical Director of the Clinical Laboratory Center at Mount Sinai Health System
- Director of the Blood Bank and Transfusion Service at Mount Sinai Hospital
- Director of Hematology and Coagulation Specialty Laboratory at Columbia University Irving Medical Center
- Director of the Parathyroid Tissue Collection and Processing Center at Columbia University Irving Medical Center
- Assistant Director of Transfusion Medicine at Columbia University Irving Medical Center
- Transfusion Medicine Specialist at the New York Blood Bank
- M.D. from the Icahn School of Medicine at Mount Sinai
- Anatomic and Clinical Pathology Residency at NewYork-Presbyterian Hospital
- Member of: American Society for Clinical Pathology
College of American Pathologists



Thanks to TECH, you will be able to learn with the best professionals in the world"

Management



Ms. Cano Armenteros, Montserrat

- ♦ Bachelor's Degree in Biology. University of Alicante
- ♦ Master's Degree in Clinical Trials University of Seville
- ♦ Official Professional Master's Degree in Primary Care Research by the Miguel Hernández University of Alicante for the Doctorate Recognition from the University of Chicago, USA Outstanding.
- ♦ Certificate of Pedagogical Aptitude (CAP) University of Alicante

Professors

Dr. Calle Guisado, Violeta

- ♦ PhD in Public and Animal Health from the University of Extremadura. Cum Laude Mention and International PhD obtained in July 2019 and Outstanding Award in her PhD in 2020.
- ♦ Degree in Biology from the University of Extremadura (2012).



04

Structure and Content

The contents of this Postgraduate Certificate have been developed by the different professors of this course, with a clear purpose: to ensure that our students acquire each and every one of the skills necessary to become true experts in this field.

A complete and well-structured program that will take you to the highest standards of quality and success.



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*An interesting syllabus from start to finish
which will take you through the process of
personal and professional growth in a more
fluid and comfortable way”*

Module 1 Instrumental Techniques in the Clinical Analysis Laboratory

- 1.1. Instrumental Techniques in Clinical Analysis
 - 1.1.1. Introduction
 - 1.1.2. Main Concepts
 - 1.1.3. Classification of Instrumental Methods
 - 1.1.3.1. Classic Methods
 - 1.1.3.2. Instrumental Methods
 - 1.1.4. Preparation of Reagents, Solutions, Buffers and Controls
 - 1.1.5. Equipment Calibration
 - 1.1.5.1. Importance of Calibration
 - 1.1.5.2. Methods of Calibration
 - 1.1.6. Clinical Analysis Process
 - 1.1.6.1. Reasons for Requesting a Clinical Analysis
 - 1.1.6.2. Phases of the Analysis Process
 - 1.1.6.3. Patient Preparation and Sample Taking
- 1.2. Microscopic Techniques in Clinical Analysis
 - 1.2.1. Introduction and Concepts
 - 1.2.2. Types of Microscopes
 - 1.2.2.1. Optical Microscopes
 - 1.2.2.2. Electronic Microscopes
 - 1.2.3. Lenses, Light and Image Formation
 - 1.2.4. Management and Maintenance of Light Optical Microscopes
 - 1.2.4.1. Handling and Properties
 - 1.2.4.2. Maintenance
 - 1.2.4.3. Observation Incidents
 - 1.2.4.4. Application in Clinical Analysis
 - 1.2.5. Other Microscopes Characteristics and Management
 - 1.2.5.1. Dark Field Microscope
 - 1.2.5.2. Polarized Light Microscope
 - 1.2.5.3. Interference Microscope
 - 1.2.5.4. Inverted Microscope
 - 1.2.5.5. Ultraviolet Light Microscope





- 1.2.5.6. Fluorescence Microscope
- 1.2.5.7. Electronic Microscope
- 1.3. Microbiological Techniques in Clinical Analysis
 - 1.3.1. Introduction and Concept
 - 1.3.2. Design and Work Standards of the Clinical Microbiology Laboratory
 - 1.3.2.1. Necessary Rules and Resources
 - 1.3.2.2. Routines and Procedures in the Laboratory
 - 1.3.2.3. Sterilization and Contamination
 - 1.3.3. Cellular Culture Techniques
 - 1.3.3.1. Growth Environment
 - 1.3.4. Most Commonly Used Extension and Staining Procedures in Clinical Microbiology
 - 1.3.4.1. Bacteria Recognition
 - 1.3.4.2. Cytological
 - 1.3.4.3. Other Procedures
 - 1.3.5. Other Methods of Microbiological Analysis
 - 1.3.5.1. Direct Microscopic Examination Identification of Normal and Pathogenic Flora
 - 1.3.5.2. Identification by Biochemical Tests
 - 1.3.5.3. Rapid Immunological Test
- 1.4. Volumetric, Gravimetric, Electrochemical and Titration Techniques
 - 1.4.1. Volumetrics Introduction and Concept
 - 1.4.1.1. Classification of Methods
 - 1.4.1.2. Laboratory Procedure to Perform a Volumetric Analysis
 - 1.4.2. Gravimetry
 - 1.4.2.1. Introduction and Concept
 - 1.4.2.2. Classification of Gravimetric Methods
 - 1.4.2.3. Laboratory Procedure to Perform a Gravimetric Analysis
 - 1.4.3. Electrochemical Techniques
 - 1.4.3.1. Introduction and Concept
 - 1.4.3.2. Potentiometry
 - 1.4.3.3. Amperometry
 - 1.4.3.4. Coulometry
 - 1.4.3.5. Conductometry

- 1.4.3.6. Application in Clinical Analysis
- 1.4.4. Evaluation
 - 1.4.4.1. Acid Base
 - 1.4.4.2. Precipitation
 - 1.4.4.3. Complex Formation
 - 1.4.4.4. Application in Clinical Analysis
- 1.5. Spectral Techniques in Clinical Analysis
 - 1.5.1. Introduction and Concepts
 - 1.5.1.1. Electromagnetic Radiation and its Interaction with the Material
 - 1.5.1.2. Radiation Absorption and Emission
 - 1.5.2. Spectrophotometry Application in Clinical Analysis
 - 1.5.2.1. Instruments
 - 1.5.2.2. Procedure
 - 1.5.3. Atomic Absorption Spectrophotometry
 - 1.5.4. Flame Emission Photometry
 - 1.5.5. Fluorimetry
 - 1.5.6. Nephelometry and Turbidimetry
 - 1.5.7. Mass and Reflectance Spectrometry
 - 1.5.7.1. Instruments
 - 1.5.7.2. Procedure
 - 1.5.8. Applications of the Most Common Spectral Techniques Currently Used in Clinical Analysis
- 1.6. Immunoanalysis Techniques in Clinical Analysis
 - 1.6.1. Introduction and Concepts
 - 1.6.1.1. Immunological Concepts
 - 1.6.1.2. Types of Immunoanalysis
 - 1.6.1.3. Cross-Reactivity and Antigen
 - 1.6.1.4. Detection Molecules
 - 1.6.1.5. Quantification and Analytical Sensitivity
 - 1.6.2. Immunohistochemical Techniques
 - 1.6.2.1. Concept
 - 1.6.2.2. Immunohistochemical Procedures
 - 1.6.3. Enzyme Immunohistochemical Technique
 - 1.6.3.1. Concept and Procedure
 - 1.6.4. Immunofluorescence
 - 1.6.4.1. Concept and Classification
 - 1.6.4.2. Immunofluorescence Procedure
 - 1.6.5. Other Methods of Immunoanalysis
 - 1.6.5.1. Immunophelometry
 - 1.6.5.2. Radial Immunodiffusion
 - 1.6.5.3. Immunoturbidimetry
- 1.7. Separation Techniques in Clinical Analysis. Chromatography and Electrophoresis
 - 1.7.1. Introduction and Concepts
 - 1.7.2. Chromatographic Techniques
 - 1.7.2.1. Principles, Concepts and Classification
 - 1.7.2.2. Gas-Liquid Chromatography Concepts and Procedure
 - 1.7.2.3. High Efficacy Liquid Chromatography Concepts and Procedure
 - 1.7.2.4. Thin Layer Chromatography
 - 1.7.2.5. Application in Clinical Analysis
 - 1.7.3. Electrophoretic Techniques
 - 1.7.3.1. Introduction and Concepts
 - 1.7.3.2. Instruments and Procedures
 - 1.7.3.3. Purpose and Field of Application in Clinical Analysis
 - 1.7.3.4. Capillary Electrophoresis
 - 1.7.3.4.1. Serum Protein Electrophoresis
 - 1.7.4. Hybrid Techniques: ICP masses, Gases masses and Liquids masses
- 1.8. Molecular Biology Techniques in Clinical Analysis
 - 1.8.1. Introduction and Concepts
 - 1.8.2. DNA and RNA Extraction Techniques
 - 1.8.2.1. Procedure and Conservation
 - 1.8.3. Chain Reaction of PCR Polymers
 - 1.8.3.1. Concept and Foundation
 - 1.8.3.2. Instruments and Procedures

- 1.8.3.3. Modifications of the PCR Method
- 1.8.4. Hybridization Techniques
- 1.8.5. Sequencing
- 1.8.6. Protein Analysis by Western Blotting
- 1.8.7. Proteomics and Genomics
 - 1.8.7.1. Concepts and Procedures in Clinical Analysis
 - 1.8.7.2. Types of Proteomic Studies
 - 1.8.7.3. Bioinformation and Proteomic
 - 1.8.7.4. Metabolomics
 - 1.8.7.5. Relevance in Biomedicine
- 1.9. Techniques for the Determination of Form Elements Flow Cytometry Bedside Testing
 - 1.9.1. Red Blood Cells Count
 - 1.9.1.1. Cellular Count Procedure
 - 1.9.1.2. Pathologies Diagnosed with this Methodology
 - 1.9.2. Leukocyte Count
 - 1.9.2.1. Procedure
 - 1.9.2.2. Pathologies Diagnosed with this Methodology
 - 1.9.3. Flow Cytometry
 - 1.9.3.1. Introduction and Concepts
 - 1.9.3.2. Technique Procedure
 - 1.9.3.3. Cytometry Techniques in Clinical Analysis
 - 1.9.3.3.1. Applications in Oncohematology
 - 1.9.3.3.2. Applications in Allergies
 - 1.9.3.3.3. Applications in Infertility
 - 1.9.4. Bedside Testing
 - 1.9.4.1. Concept
 - 1.9.4.2. Types of Samples
 - 1.9.4.3. Techniques Used
 - 1.9.4.4. Most Used Applications in Bedside Testing

- 1.10. Interpretation of Results, Analytical Method Evaluation and Analytical Interferences
 - 1.10.1. Laboratory Report
 - 1.10.1.1. Concept
 - 1.10.1.2. Characteristic Elements of a Laboratory Report
 - 1.10.1.3. Interpretation of the Report
 - 1.10.2. Evaluation of Analytical Methods in Clinical Analysis
 - 1.10.2.1. Concepts and Objectives
 - 1.10.2.2. Linearity
 - 1.10.2.3. Truthfulness
 - 1.10.2.4. Precision
 - 1.10.3. Analytical Interferences
 - 1.10.3.1. Concept, Foundation and Classification
 - 1.10.3.2. Endogenous Interferents
 - 1.10.3.3. Exogenous Interferents
 - 1.10.3.4. Procedures for Detecting and Quantifying an Interference in a Specific Method or Analysis



A unique, key, and decisive master's degree experience to boost your professional development"

05 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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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

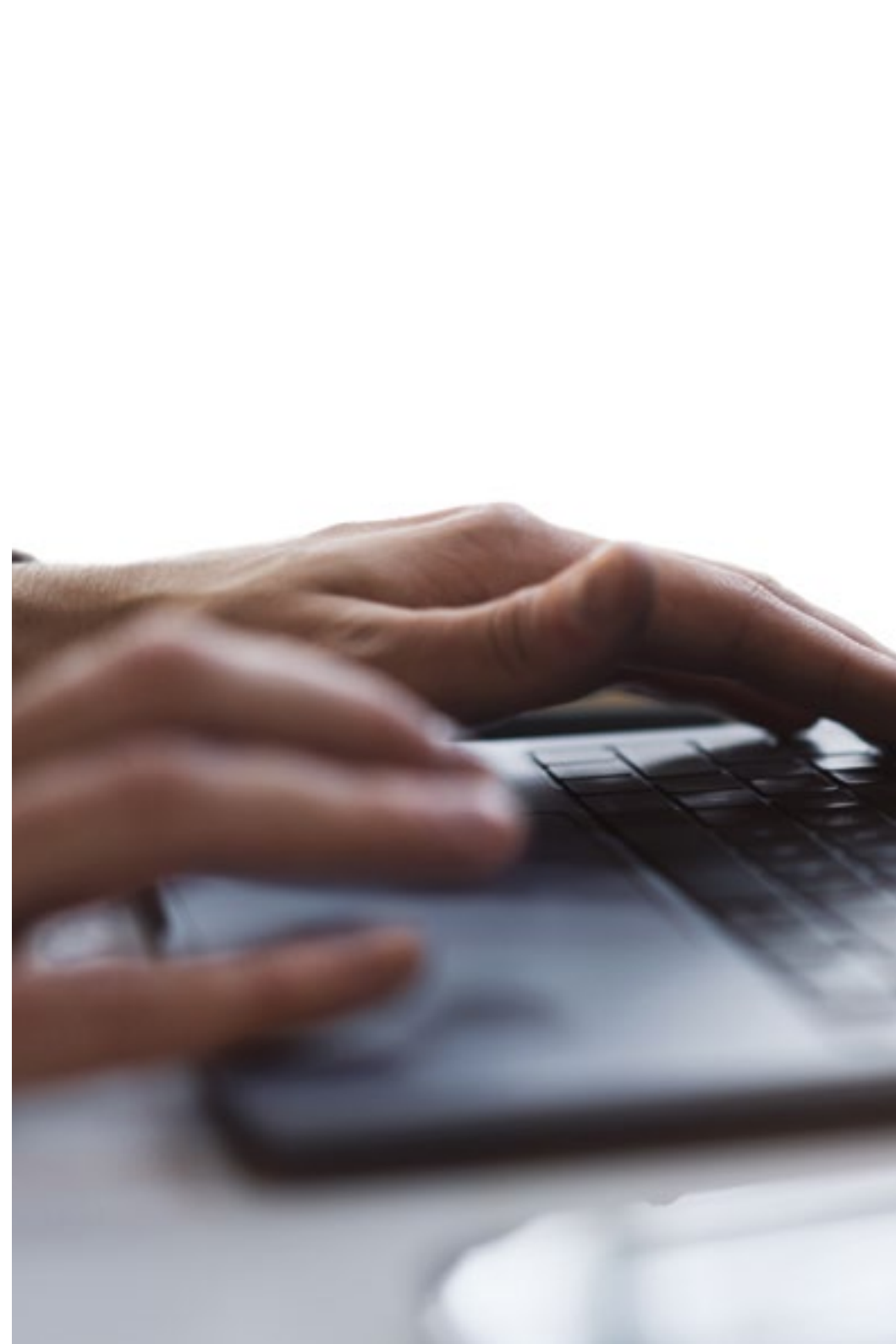
In TECH's study methodology, the student is the main protagonist.

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.

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*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.

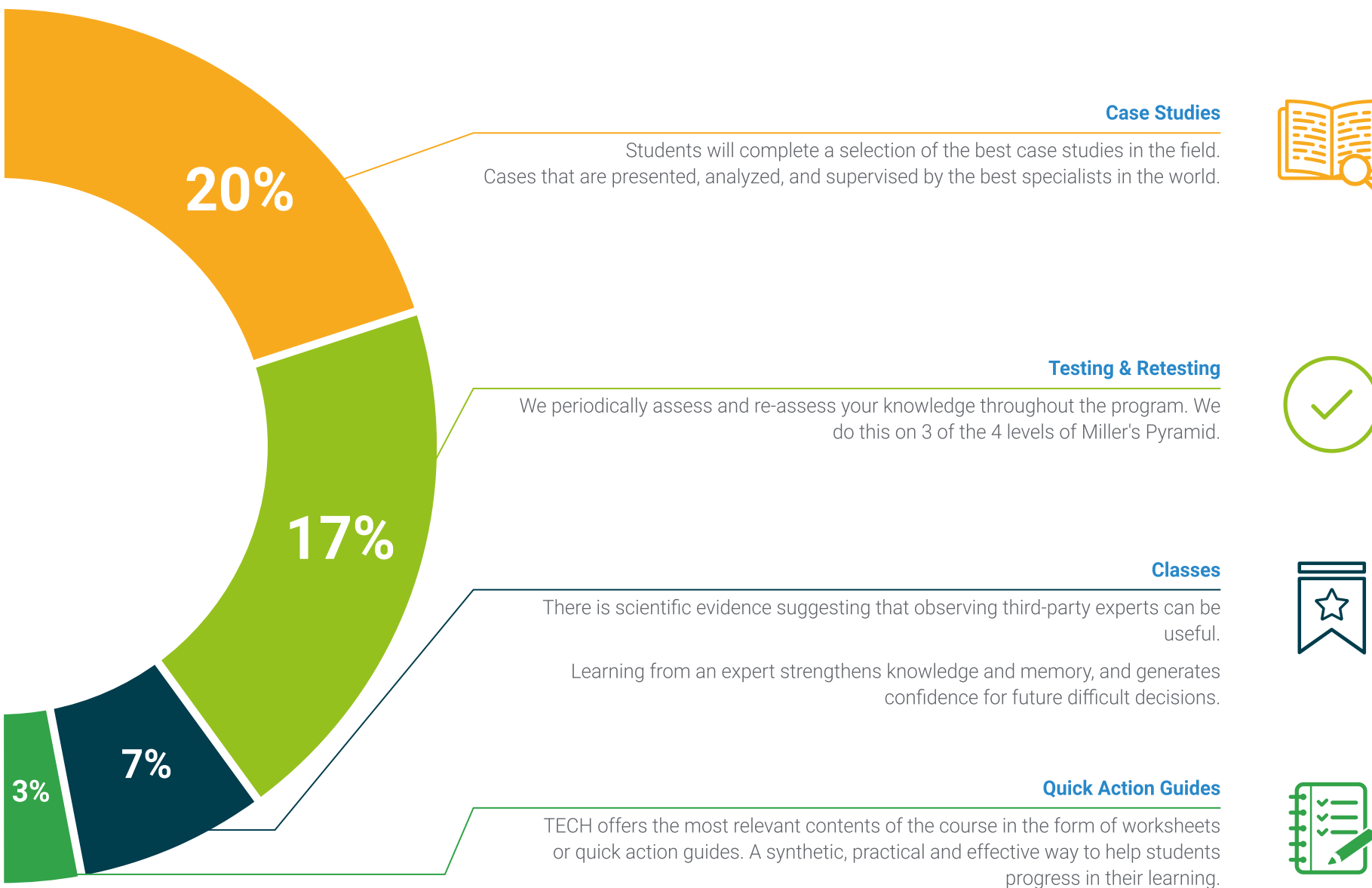
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





06 Certificate

Through a different and stimulating learning experience, you will be able to acquire the necessary skills to take a big step in your training. An opportunity to progress, with the support and monitoring of a modern and specialized university, which will propel you to another professional level.



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Include in your training a Postgraduate Certificate in Instrumental Techniques in the Clinical Analysis Laboratory: a highly qualified added value for any professional in this area"

This program will allow you to obtain your **Postgraduate Certificate in Instrumental Techniques in the Clinical Analysis Laboratory** 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 Instrumental Techniques in the Clinical Analysis Laboratory**

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 presentation
development languages
virtual classroom



Postgraduate Certificate
Instrumental Techniques
in the Clinical Analysis Laboratory

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Postgraduate Certificate

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