

Postgraduate Certificate

Fitness Instructor in Physical Exercise in Children, Adolescents and Older Adults

Endorsed by the NBA



tech global
university



Postgraduate Certificate

Fitness Instructor in Physical Exercise in Children, Adolescents and Older Adults

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

Website: www.techtute.com/us/sports-science/postgraduate-certificate/fitness-instructor-physical-exercise-children-adolescents-older-adults

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01

Introduction

A Fitness Instructor must face in their daily work different situations to which they must be able to respond successfully. Among them, one of the most common concerns for professionals is the attention to populations of different ages, since it is necessary to know how to work with their needs in order to be able to offer them a correct service adapted to their requirements. Therefore, this academic program seeks to nurture the knowledge of sports professionals to be able to work with special groups such as pregnant women, obese people, children and youth, knowing how to adapt their physical possibilities to the training plan in order to offer them optimal results.



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TECH provides students with a highly demanding program where they can learn to work with special age groups such as children, adolescents or older adults"

This Postgraduate Certificate will address in depth the training process in different age stages such as infant, juvenile and elderly. The main characteristics of each of these stages will be broken down based on their morpho-functional changes, the incidence of neurosciences and nutrition with the objective of planning training sessions respecting the individuality of the physical workload

All this, compiled into an academic program of only six weeks and that aims to become a before and after for the student's professional career, allowing them to work as a Fitness Instructor for people of special ages with greater guarantees

In addition, as this is an online program, professionals can update their knowledge and acquire new competencies without having to give up or neglect the rest of their daily activities

This **Postgraduate Certificate in Fitness Instructor in Physical Exercise in Children and Adolescents and Older Adults** contains the most complete and up-to-date program on the market. The most important features of the program include:

- ♦ Practical cases presented by experts in Physical Activity and Sport
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative 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



Provide the best customer care for your clients of special ages and start competing with the best in the industry"

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Welcome to the academic program that will lay the foundation for your professional growth and open the doors to a promising future"

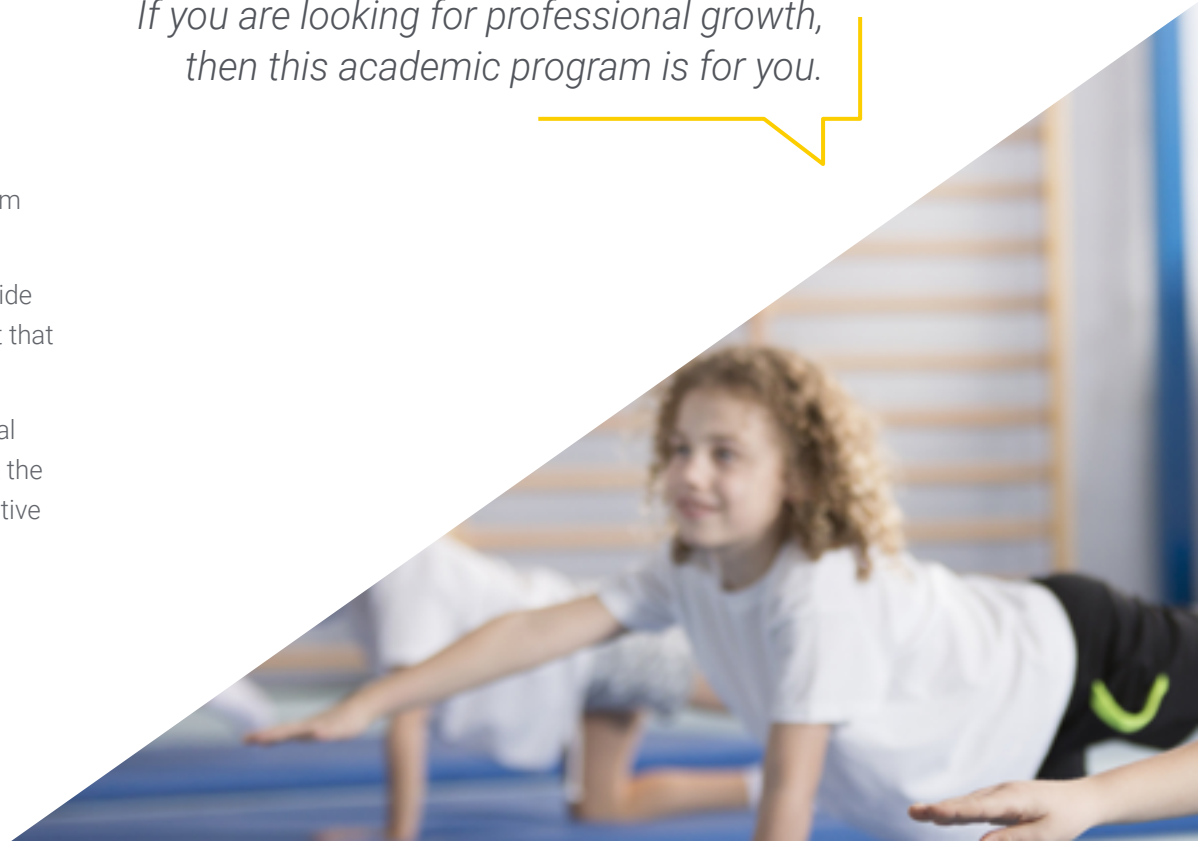
The program includes, in its teaching staff, professionals from the sector who bring their work experience to this refresher program, as well as renowned specialists from reference societies and prestigious universities

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 immersive training programmed to train in real situations

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

Turn your professional career around with this Certificate Postgraduate Certificate.

If you are looking for professional growth, then this academic program is for you.



02 Objectives

The main objective of this academic program is to enhance students' acquisition of specific skills that will become the foundation on which they will base their daily practice. To this end, a program of the highest level has been created based on the latest developments in the sector and created with the utmost scientific rigor. These contents will be taught by a team of first-class professionals who will provide the student with valuable tools to work as a Fitness Instructor, knowing how to work and attend special groups



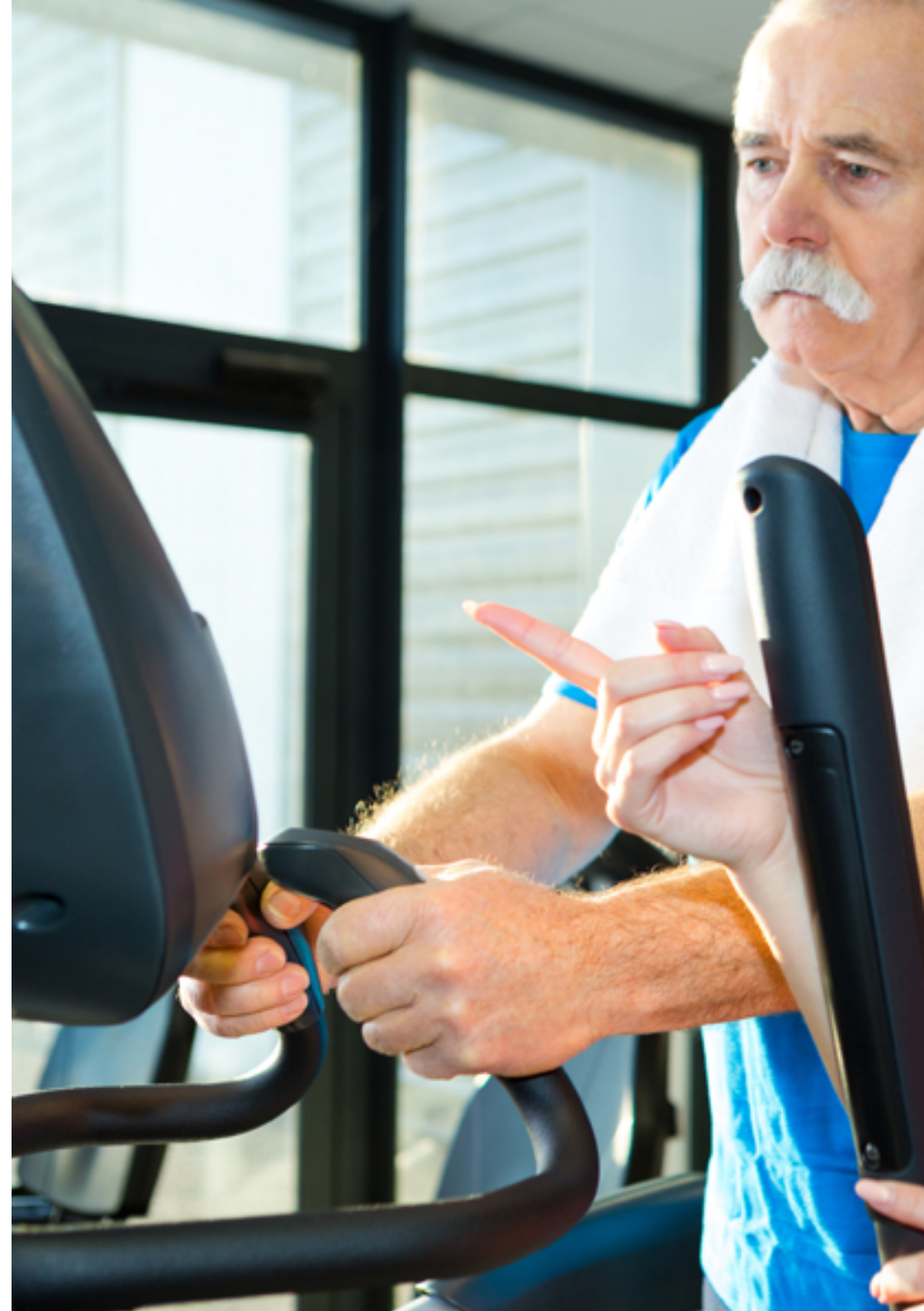
“

If your goal is to grow and start working as a Fitness Instructor knowing how to work with special age groups, then you will love this program"



General Objectives

- Acquire knowledge based on the most current scientific evidence with full applicability in the practical field
- Master all the most advanced methods of sports performance evaluation
- Master and apply with certainty the most current training methods to improve sports performance and quality of life, as well as to improve the most common pathologies
- Master the principles governing exercise physiology, as well as biochemistry
- Successfully integrate all the knowledge acquired in the different modules in real practice





Specific Objectives

- ♦ In-depth understanding of the biopsychosocial aspects of children, adolescents and older adults
- ♦ In-depth knowledge of the particularities of each age group and their specific approach
- ♦ Be able to plan and program training in an individualized way for children, adolescents and older adults



Your goals and TECH's goals come together and materialize in this academic program with excellent curricular"

03

Course Management

The faculty of this program is made up of a group of active and highly qualified experts. Thus, the professional who decides to take this program with TECH, will learn from a faculty of excellence, with years of experience in the sector and with the greatest desire to graduate the best in this field. For this reason, this team has also designed the contents of the program, ensuring the student a complete learning experience, based on the highest scientific rigor and the latest developments in the sector.



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TECH has made a major effort to bring you the most complete and multidisciplinary teaching staff in the sector. Don't miss the opportunity to study with the best"

Management



Mr. Rubina, Dardo

- ♦ CEO of Test and Training
- ♦ EDM Physical Training Coordinator
- ♦ Physical trainer of the EDM First Team
- ♦ Master's Degree in High Performance in Sports(ARD) COE
- ♦ EXOS Certification
- ♦ Specialist in Strength Training for the Prevention of Injuries, Functional and Physical-Sports Rehabilitation
- ♦ Specialist in Strength Training Applied to Physical and Sports Performance
- ♦ Certification in Weight Management and Physical Performance Technologies
- ♦ Postgraduate course in Physical Activity in Populations with Pathologies
- ♦ Diploma in Advanced Studies (DEA) University of Castilla la Mancha
- ♦ PhD in High Performance Sports(ARD)



Professors

Mr. Renda, Juan

- ♦ National Professor of Physical Education. ISEF No. 1 "Dr. Enrique Romero Brest".
- ♦ Degree in Kinesiology and Physiatry. University Institute H.A. Foundation Babelo.
- ♦ Bachelor's Degree in Physical Education with a specialization in Physiology of General Physical Work at San Martin National University.
- ♦ Master's Degree in Physical Education at the National University of Lomas de Zamora

04

Structure and Content

The contents of this Postgraduate Certificate have been designed based on the highest scientific rigor and taking into account the latest developments in the sector. In the same way, a group of experts from prestigious institutions have been in charge of designing and shaping the syllabus. They have contributed to this academic updating program with the experience of their years of work and their constant research in this field of study. This allows us to provide students with the most complete library of contents on the market, which will become their theoretical support when facing their daily work.



“

*Premium content designed by and
for professionals of excellence"*

Module 1. Physical Exercise in Children, Adolescents and Older Adults

- 1.1. Physical Exercise in Children and Adolescents
 - 1.1.1. Growth, Maturation and Development
 - 1.1.2. Development and Individuality: Chronological Age vs. Biological Age
 - 1.1.3. Sensitive Phases
 - 1.1.4. Long-term Development (*Long-term Athlete Development*)
- 1.2. Physical Fitness Assessment in Children and Adolescents
 - 1.2.1. Main Assessment Tools
 - 1.2.2. Assessment of Coordinative Capacities
 - 1.2.3. Assessment of Conditional Capacities
 - 1.2.4. Morphological Assessments
- 1.3. Physical Exercise Planning for Children and Adolescents
 - 1.3.1. Muscle Strength Training
 - 1.3.2. Aerobic Fitness Training
 - 1.3.3. Speed Training
 - 1.3.4. Flexibility Training
- 1.4. Neurosciences and Child and Adolescent Development
 - 1.4.1. Neurolearning in Childhood
 - 1.4.2. Motor Skills. Basis of Intelligence
 - 1.4.3. Attention and Emotion. Early Learning
 - 1.4.4. Neurobiology and Epigenetic Theory in Learning
- 1.5. Approach to Physical Exercise in the Older Adult
 - 1.5.1. Aging Process
 - 1.5.2. Morphofunctional Changes in the Older Adult
 - 1.5.3. Objectives of Physical Exercise in the Older Adult
 - 1.5.4. Benefits of Physical Exercise in the Older Adult
- 1.6. Comprehensive Gerontological Assessment
 - 1.6.1. Coordination Skills Test
 - 1.6.2. Katz Index of Independence in Activities of Daily Living
 - 1.6.3. Test of Conditioning Capacities
 - 1.6.4. Fragility and Vulnerability in Older Adults





- 1.7. Instability Syndrome
 - 1.7.1. Epidemiology of Elderly Woman Obesity
 - 1.7.2. Detection of Patients at Risk without a Previous Fall
 - 1.7.3. Risk Factors for Falls in the Elderly
 - 1.7.4. Post-Fall Syndrome
- 1.8. Nutrition in Children, Adolescents and Older Adults
 - 1.8.1. Nutritional Requirements for Each Stage of Life
 - 1.8.2. Increased Prevalence of Childhood Obesity and Type 2 Diabetes in Children
 - 1.8.3. Association of Degenerative Diseases with Saturated Fat Consumption
 - 1.8.4. Nutritional Recommendations for the Practice of Physical Exercise
- 1.9. Neurosciences and Older Adults
 - 1.9.1. Neurogenesis and Learning
 - 1.9.2. Cognitive Reserve in Older Adults
 - 1.9.3. We Can Always Learn
 - 1.9.4. Aging is not Synonymous with Disease
 - 1.9.5. Alzheimer's and Parkinson's Disease, the Value of Physical Activity
- 1.10. Physical Exercise Planning for Older Adults
 - 1.10.1. Muscle Strength and Power Training
 - 1.10.2. Aerobic Fitness Training
 - 1.10.3. Cognitive Training
 - 1.10.4. Training Coordinative Capacities
 - 1.10.5. Conclusion and Closing of the Module



*Study at TECH and start multiplying
your job possibilities"*

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.



“

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.

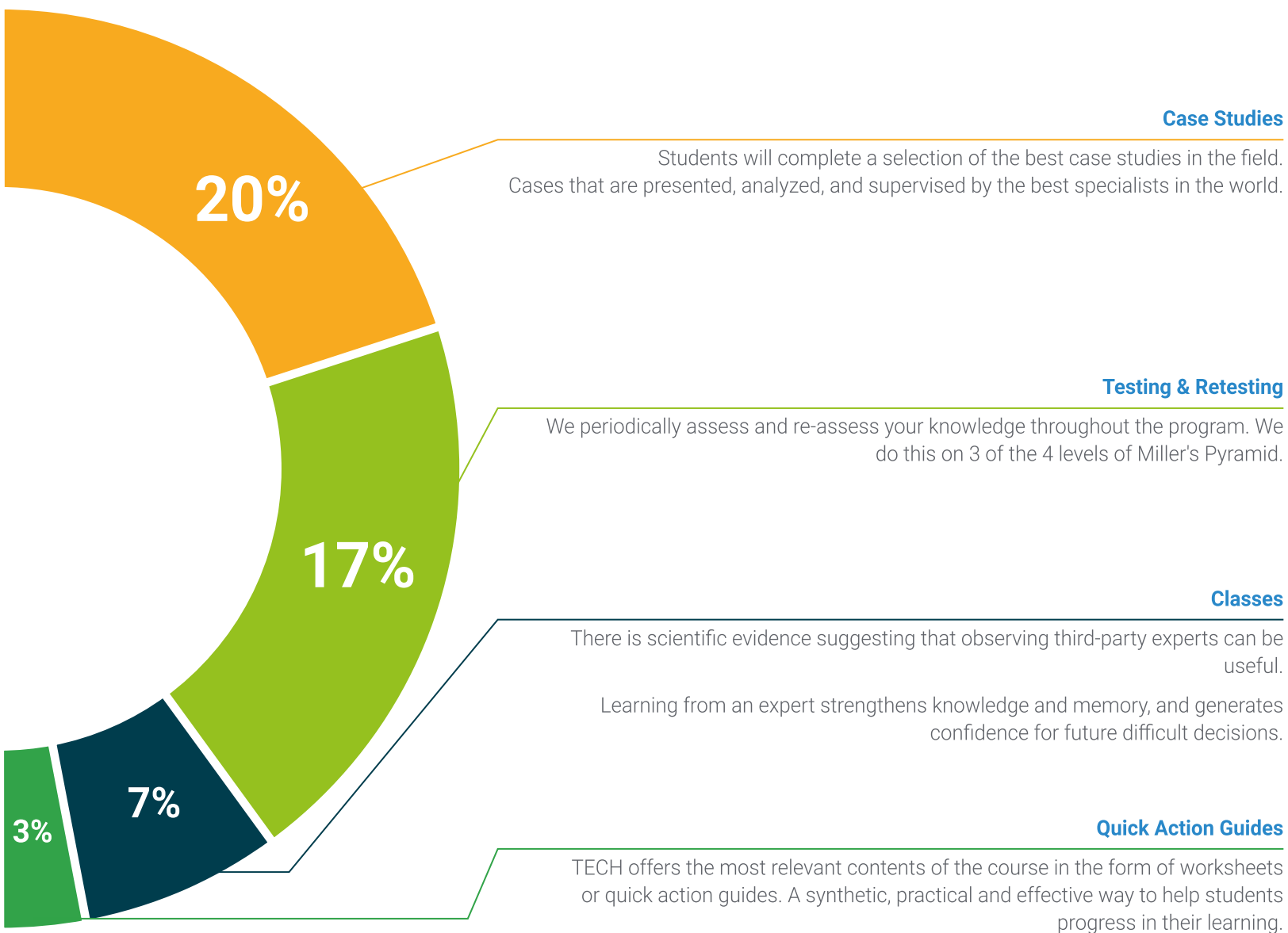
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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

The Postgraduate Certificate in Fitness Instructor in Physical Exercise in Children, Adolescents and Older Adults 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 private qualification will allow you to obtain a **Postgraduate Certificate in Fitness Instructor in Physical Exercise in Children, Adolescents and Older Adults** 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 Fitness Instructor in Physical Exercise in Children, Adolescents and Older Adults**

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
online training
development languages
virtual classroom



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