Postgraduate Certificate

Audio Equipment in Recording Studios

tech technological university

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Postgraduate Certificate
Audio Equipment in Recording Studios

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

Website: **www.techtitute.com/us/engineering/postgraduate-certificate/audio-equipment-recording-studios**

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01

Introduction

In a context where sound quality plays a crucial role, technological evolution has led to the efficient and accurate capture and processing of audio. Advances that lead engineers to perfect the techniques and devices used for recording, as well as the design of the spaces dedicated to it. This program offers solid instruction in essential areas such as recording systems and recording techniques used in the field of acoustic engineering and audio production. With a 100% online mode and an innovative methodology, students have the necessary flexibility to combine professional and personal daily activities with quality education.

Become the architect of immersive sound experiences and redefine the standard of quality in the world of Audio. Do it by studying at TECH!"

In an environment where sound excellence plays a critical role, the recording and music production industry is facing an increasing demand for highly trained professionals in the field of Audio Engineering in Recording Studio Environments. This need arises due to the importance of ensuring optimal acoustics in various projects, such as music and audio production, where sound quality is essential for the success of this discipline.

To address this demand and solve this problem, this academic course is presented, which offers a comprehensive learning in relevant aspects ranging from the design and planning of recording rooms to the selection and configuration of microphones, as well as the efficient management of technical resources. Students acquire a complete mastery of the recording process, from pre-production to post-production stages, which allows them to approach projects in a comprehensive manner.

The online modality of this academic program and its innovative methodology offer significant advantages for students. The flexible schedule provided by virtual learning allows them to acquire and apply skills effectively, without having to interrupt their work responsibilities. Additionally, it enables students to keep up to date with the latest technological trends and access specialized readings, as well as internalize their knowledge under the successful Relearning methodology.

This **Postgraduate Certificate in Audio Equipment in Recording Studios** contains the most complete and up-to-date educational program on the market. The most important features include:

- Development of case studies presented by experts in Acoustics engineering
- 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
- The practical exercises where the self-evaluation process can be carried out 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

Open your mind to a world of possibilities and immerse yourself in the magic of sound. Enroll now"

Master with TECH the Audio advances in Recording Studios and become an expert in the creation of quality sound environments"

Numerous teaching materials are available to you, accessible at any time of the day and from your cell phone.

Be the creator of immersive soundscapes by learning how to design recording rooms.

The program includes in its teaching staff professionals of the sector who pour into this training the experience of their work, in addition to recognized specialists from reference societies and prestigious universities.

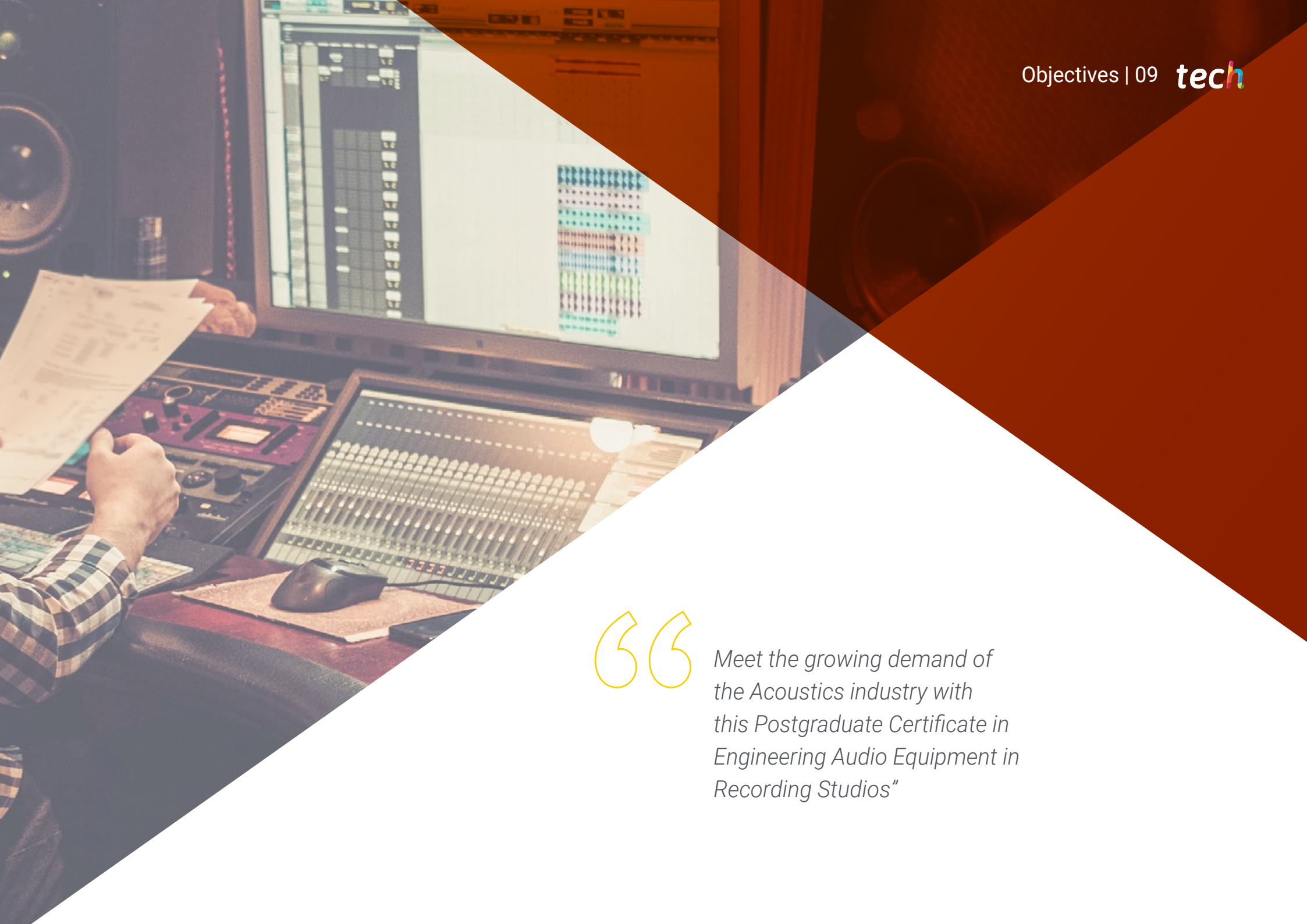
Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive training programmed to train in real situations.

The design of this program focuses on Problem-Based Learning, in which the professional will have to try to solve the different professional practice situations that will arise throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

02

Objectives

This Postgraduate Certificate focuses on providing the students with specialized knowledge in Acoustic Engineering and audio production. Its main objective is to train students to work with recording equipment in studios and keep them updated on technological trends in this field. Upon completion, students will have acquired the ability to use state-of-the-art recording equipment, recording software effectively or apply microphone techniques in various situations.

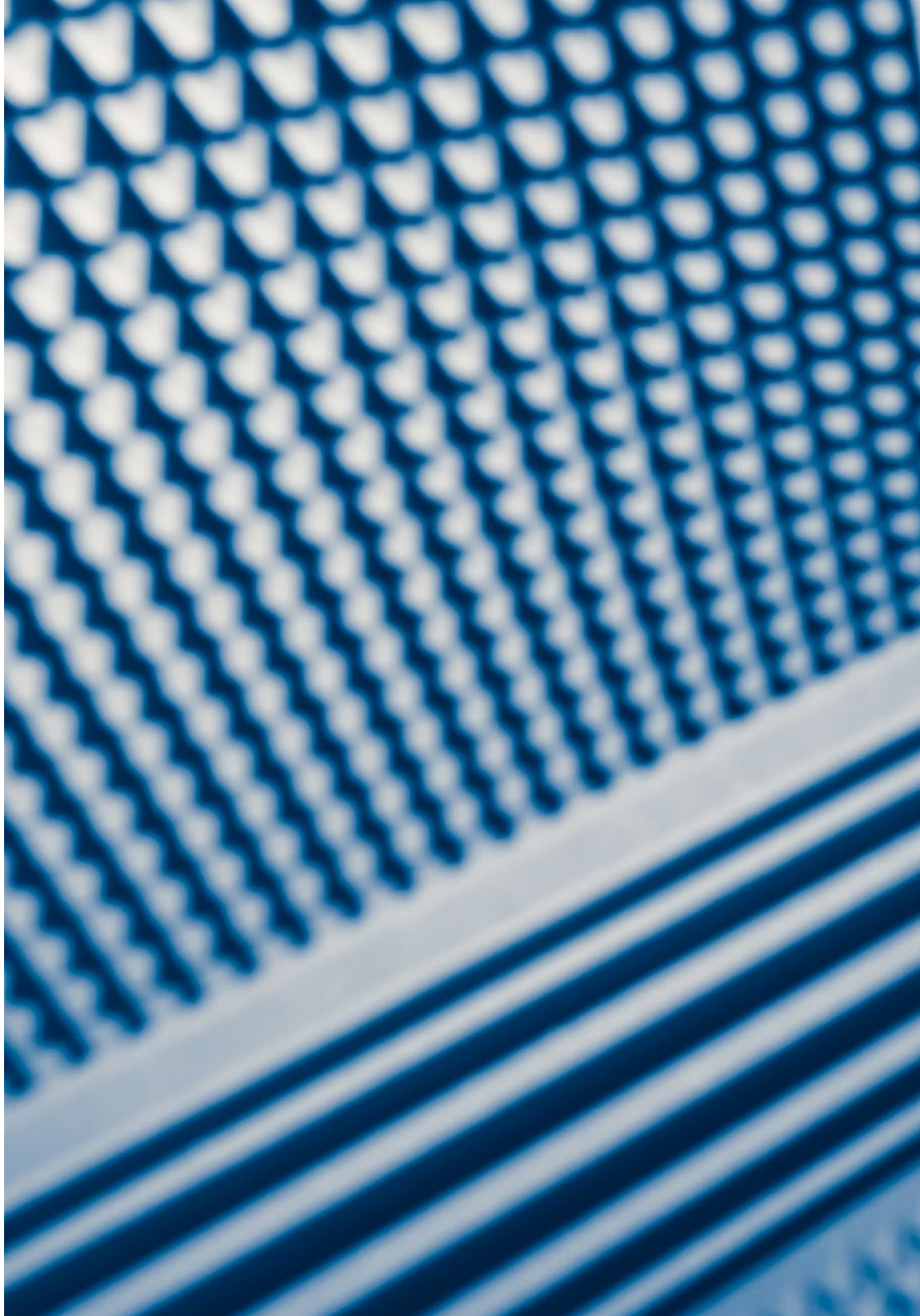


Meet the growing demand of the Acoustics industry with this Postgraduate Certificate in Engineering Audio Equipment in Recording Studios"

General Objectives

- Provide a solid understanding of the fundamentals and key concepts related to audio recording and the instrumentation used in recording studios
- Develop the capacity to apply recording techniques and use recording systems effectively in a variety of acoustical engineering and audio production contexts
- Promote up-to-date knowledge of the constantly evolving technology in the field of audio recording and associated instrumentation
- Determine the protocols for handling advanced recording equipment and their application in practical acoustical engineering situations

Choose the perfect balance of creativity and technology in the exciting world of audio production"



Specific Objectives

- Identify and effectively use recording equipment, cables, connectors, and other essential devices used in recording studios
- Develop specific miking and microphone positioning techniques to capture high-quality audio in a variety of situations, such as vocal, instrumental, and group recordings
- Manage the audio chain, from input signal to recording and monitoring, ensuring an efficient and high quality workflow
- Evaluate different audio interfaces for specific projects
- Solve common audio recording problems, such as unwanted noise, phase problems, and noise cancellation, to ensure the quality of the recordings

03

Course Management

The excellence of the expert teachers who lead this academic program ensures the quality and timeliness of the knowledge to be developed during the process. These distinguished professionals in the field of Audio Engineering and sound recording bring extensive practical experience and up-to-date knowledge to the teaching. Their in-depth knowledge of the challenges and advances in the audio recording industry ensures that students are exposed to the most current and relevant practices. Under the guidance of these teachers and the implementation of the successful *Relearning*methodology, students will have the opportunity to be prepared in the face of technological evolution.

Acquire a deep insight into acoustics and explore how to shape sound reality to your will. Prepare yourself with real experts"

Management

D. Espinosa Corbellini, Daniel

- Expert Consultant in Audio Equipment and Room Acoustics
- Professor at the School of Engineering of Puerto Real from the University of Cadiz
- Design Engineer at Coelan Electrical Installations Company
- Audio Technician in Sales and Installations in the Daniel Sonido company
- Industrial Technical Engineer in Industrial Electronics at the University of Cadiz
- Industrial Engineer in Industrial Organization by the University of Cadiz
- Official Master's Degree in Evaluation and Management of Noise Pollution by the University of Cadiz
- Official Master's Degree in Acoustic Engineering from the University of Cadiz and the University of Granada
- Diploma of Advanced Studies by the University of Cadiz

Professors

Dr. Muñoz Montoro, Antonio Jesús

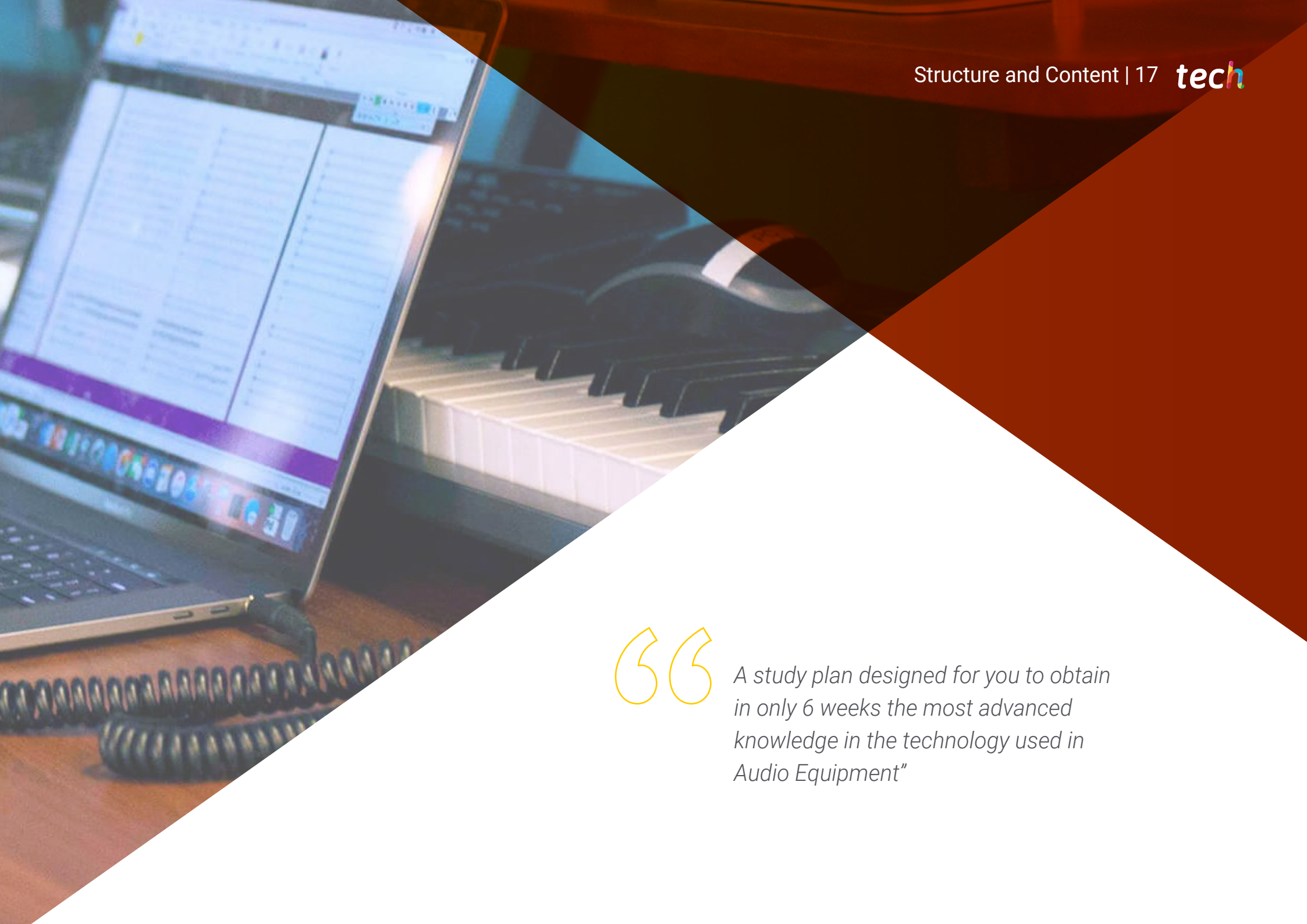
- Researcher in musical and biomedical signals and their applications
- Assistant Professor at the University of Oviedo
- Teaching and Research Staff at the of Distance Learning University of Madrid
- Interim Substitute Professor at the University of Oviedo
- Professor and Tutor at the Associated Center of the UNED in Jaén
- Research group "Signal Processing and Telecommunication Systems" (TIC188) of the University of Jaén
- Research Group "Quantum and High Performance Computing" of the University of Oviedo
- PhD in Telecommunication Engineering from the University of Jaén
- Telecommunication Engineer from the University of Málaga

A unique, key and decisive educational experience to boost your professional development"

04

Structure and Content

In the academic context of this program, students will explore a wide range of essential concepts and techniques of technical audio equipment used in professional recording studios. Throughout this module, key concepts such as the configuration and design of recording and control rooms, the recording process from pre-production to post-production and resource management will be addressed. Crucial technical aspects such as audio formats, cables and advanced microphone techniques will also be covered in depth. A unique learning opportunity, through the best pedagogical content.



A study plan designed for you to obtain in only 6 weeks the most advanced knowledge in the technology used in Audio Equipment"

Module 1. Recording Systems and Studio Recording Techniques

1.1. The Recording Studio
- 1.1.1. The Recording Room
- 1.1.2. Design of Recording Rooms
- 1.1.3. The Control Room
- 1.1.4. Control Room Design

1.2. Recording Process
- 1.2.1. Pre-Production
- 1.2.2. Recording in the Studio
- 1.2.3. Postproduction

1.3. Technical Production in the Recording Studio
- 1.3.1. Roles and Responsibilities in Production
- 1.3.2. Creativity and Decision Making
- 1.3.3. Resources Management
- 1.3.4. Type of Recording
- 1.3.5. Room Types
- 1.3.6. Technical Equipment

1.4. Audio Formats
- 1.4.1. Audio File Formats
- 1.4.2. Audio Quality and Data Compression
- 1.4.3. Format Conversion and Resolution

1.5. Cables and Connectors
- 1.5.1. Electrical Wiring
- 1.5.2. Charging Wiring
- 1.5.3. Analog Signal Wiring
- 1.5.4. Digital Signal Wiring
- 1.5.5. Balanced, Unbalanced, Stereo and Monophonic Signal.

1.6. Audio Interfaces
- 1.6.1. Functions and Characteristics of Audio Interfaces
- 1.6.2. Configuration and Use of Audio Interfaces
- 1.6.3. Choosing the Right Interface for Each Project

1.7. Studio Headphones
- 1.7.1. Structure
- 1.7.2. Types of Headphones
- 1.7.3. Specifications
- 1.7.4. Binaural Reproduction

1.8. The Audio Chain
- 1.8.1. Signal Routing
- 1.8.2. Recording Chain
- 1.8.3. Monitoring Chain
- 1.8.4. MIDI Recording

1.9. Mixer
- 1.9.1. Types of Inputs and Their Characteristics
- 1.9.2. Channel Functions
- 1.9.3. Mixers
- 1.9.4. DAW Controllers

1.10. Studio Microphone Techniques
- 1.10.1. Microphone Positioning
- 1.10.2. Microphone Selection and Configuration
- 1.10.3. Advanced Microphone Techniques

Become the expert in Microphone Techniques and leave your mark in the world of audio"

05

Methodology

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

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

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

Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world"

You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

> *Our program prepares you to face new challenges in uncertain environments and achieve success in your career"*

The case method is the most widely used learning system in the best faculties in the world. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

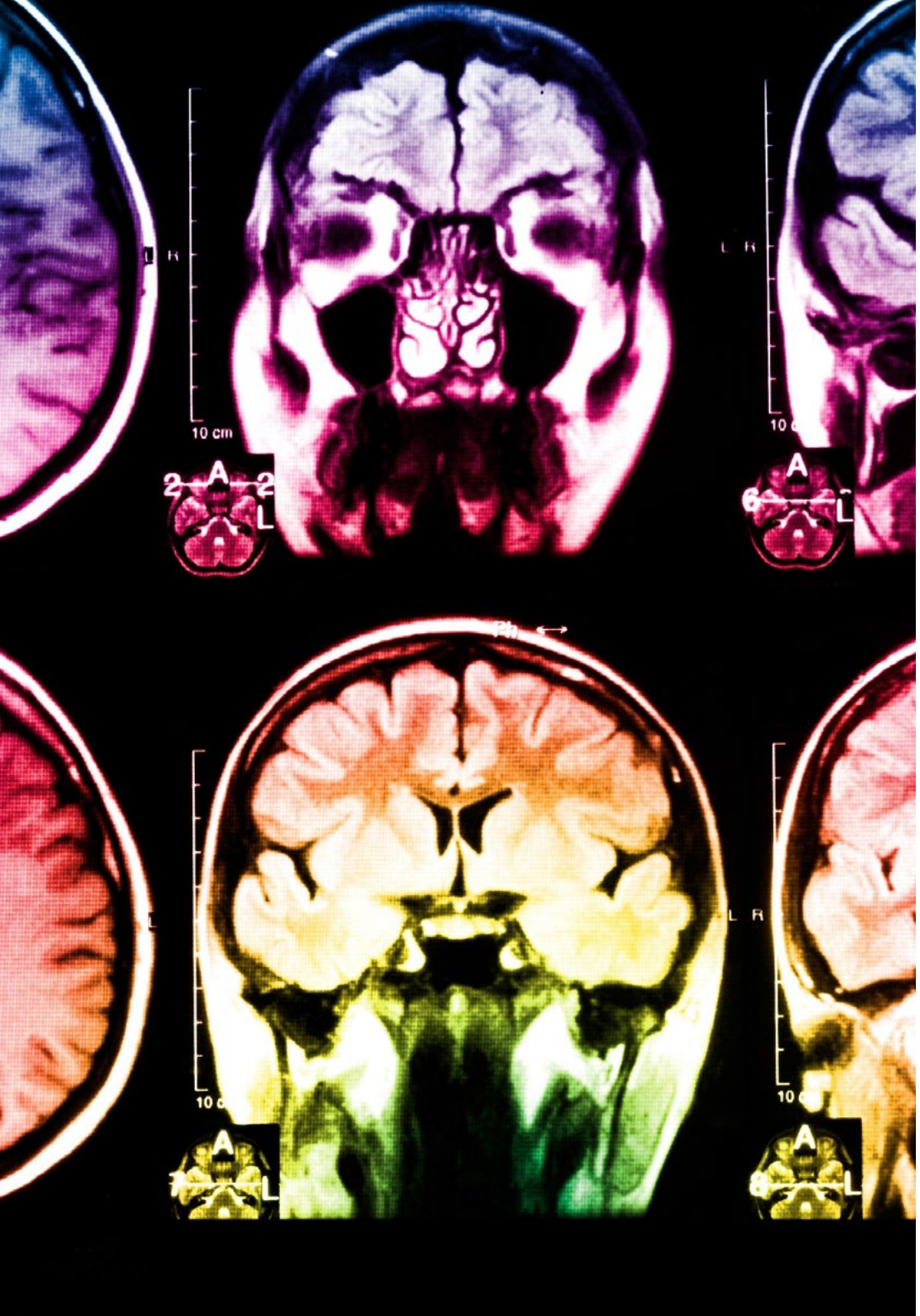
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH, you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



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. This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5. years.

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.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

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.

Classes

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

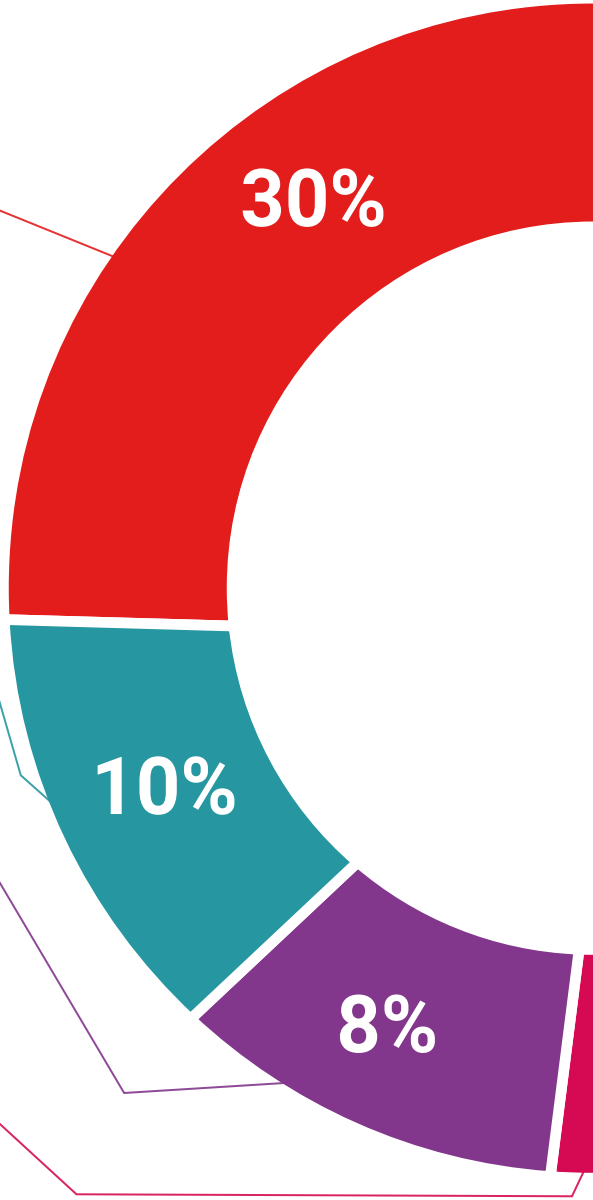
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

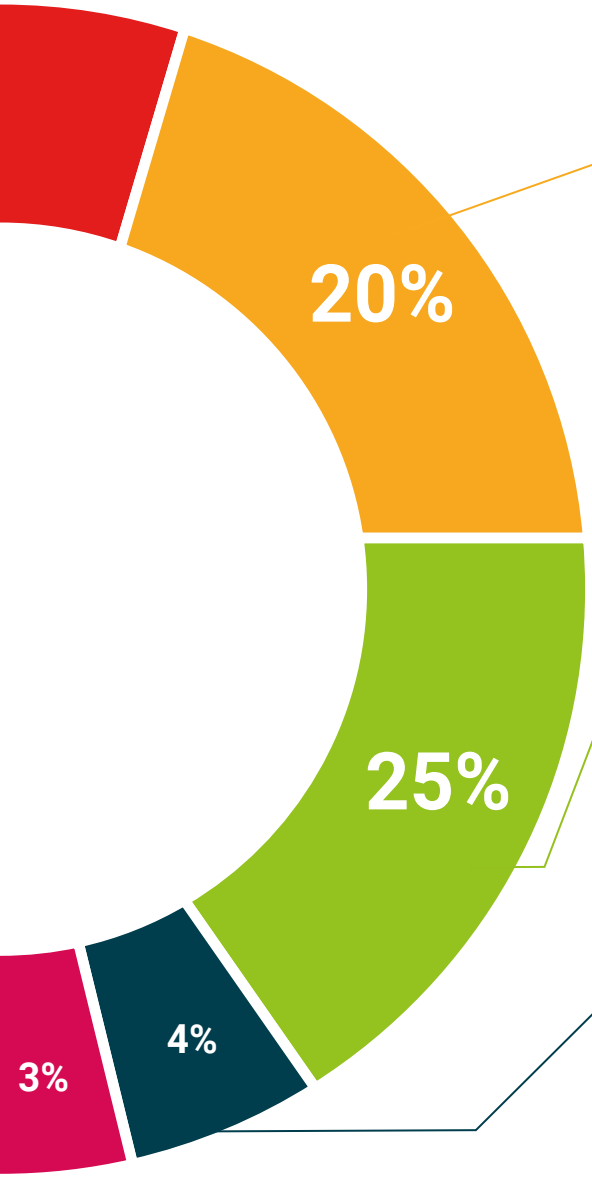
Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.

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.





Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.

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".

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.

06

Certificate

The Postgraduate Certificate in Audio Equipment in Recording Studios Applied to Drones guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This **Postgraduate Certificate in Audio Equipment in Recording Studios** contains the most complete and up-to-date program on the market.

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

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

Title: **Postgraduate Certificate in Audio Equipment in Recording Studios**

Official Nº of hours: **150 h.**


tech technological university

Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Audio Equipment in Recording Studios

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

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

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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