

Postgraduate Certificate

Update on Cardiopulmonary Resuscitation and Invasive Techniques in the Emergency Department





Postgraduate Certificate

Update on Cardiopulmonary Resuscitation and Invasive Techniques in the Emergency Department

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 4 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/nursing/postgraduate-certificate/update-cardiopulmonary-resuscitation-invasive-techniques-emergency-department

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01

Introduction

Due to the evolution of nursing procedures combined with advances in medical technology, it is essential for professionals working in emergency services to continuously update their knowledge in pulmonology emergencies, in order to provide care based on the latest scientific evidence. This course offers a practical and tailored approach to the professional's update.





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The quality of care for individuals with respiratory conditions depends on the up-to-date knowledge of the professionals providing care. Stay updated on the nursing procedures and care delivered by professionals in the emergency department of the hospital”

The primary mission of the Hospital Emergency Department is to respond to the urgent healthcare demands of the population, offering care that is not only effective, efficient, and equitable but also prioritizes quality as one of its main components.

Respiratory conditions, in particular, represent one of the most frequently treated illnesses in the emergency department by nursing professionals, due to the wide range of aggravating factors that can influence this type of pathology, such as respiratory infections, emotions, temperature, environmental pollutants, and toxic habits, among others. Therefore, updating knowledge in pulmonology emergencies is considered essential for the proper development of nursing in the emergency department.

Through this course, nursing professionals will be able to care for patients with respiratory emergencies in the most efficient manner, as it allows students to familiarize themselves with real clinical situations they may face in the future as part of their duties.

This **Postgraduate Certificate in Update on Cardiopulmonary Resuscitation and Invasive Techniques in the Emergency Department** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Clinical cases presented by experts. The graphical, schematic, and highly practical content is designed to provide scientific and healthcare information on the medical disciplines essential for professional practice
- ♦ Diagnostic-therapeutic innovations in the care of patients with respiratory emergencies
- ♦ Presentation of practical workshops on procedures diagnosis, and treatment techniques
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Includes theoretical lectures, questions to the expert, discussion forums on controversial issues and individual reflection papers
- ♦ Content that is accessible from any fixed or portable device with an internet connection



Through this Postgraduate Certificate, you will update your knowledge in the care of patients with traumatic and neuro-surgical emergency conditions, improve their prognosis, and reduce sequelae and complications"

“

This Postgraduate Certificate may be the best investment you can make when selecting an update program for two reasons: in addition to updating your knowledge in Cardiopulmonary Resuscitation and Invasive Techniques in the Emergency Department, you will receive a diploma for the Postgraduate Certificate awarded by TECH Global University”

Its teaching staff includes leading nursing professionals, who contribute their work experience to this up to date program, in addition to other professionals specializing in the Hospital Emergency Services.

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.

The design of the program is based on Problem-Based Learning, by means of which the nursing professional must try to solve the different professional practice situations that arise throughout the program. For this reason, you will be assisted by an innovative interactive video system created by renowned and experienced experts in the field of surgical nursing care with extensive teaching experience.

This program offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

It includes clinical cases to bring the development of the program as close as possible to the reality of nursing care.



02

Objectives

The course is focused on reviewing the main aspects of managing patients with endocrinological and urological emergencies, based on scientific evidence and the experience of renowned professionals.



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This program will give you a sense of confidence when taking decisions and providing care, which will help you grow both personally and professionally”



General Objectives

- Update nursing professionals who carry out their duties in the emergency department, following the principles of nursing methodology, to perform cardiopulmonary resuscitation maneuvers and invasive techniques on critically ill patients

Seize the opportunity and take the step to update yourself on the most important aspects of Cardiopulmonary Resuscitation and Invasive Techniques in the Emergency Department.





Specific Objectives

- ♦ Develop the necessary skills to establish effective communication with the patient and their family environment
- ♦ Update teamwork processes for the proper functioning of the emergency department
- ♦ Describe the basic structure and functioning of a hospital emergency department
- ♦ Prioritize, organize and manage patient care in the most efficient way through triage
- ♦ Update the use of key resources on the Web related to nursing in emergencies
- ♦ Apply the recommendations from CPR guidelines in nursing
- ♦ Identify and categorize different arrhythmias based on criteria such as heart rate and QRS complex morphology
- ♦ Differentiate between various vital signs in order to apply the appropriate basic and advanced cardiopulmonary resuscitation algorithm for adults
- ♦ Explain the necessary maneuvers to clear the airway
- ♦ Update invasive techniques to be applied to critically ill patients
- ♦ Update the pediatric life support algorithm

03

Course Management

The program includes a teaching staff of renowned nursing professionals in the field of hospital emergencies, who contribute their work experience to this training. In addition, other distinguished specialists have participated in the development of the course content, enriching the program through an interdisciplinary approach.



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Learn from leading professionals about the latest advances in the care of patients with traumatic and neuro-surgical emergencies”

Management



Mr. Mora Rivero, Jorge

- ♦ Degree in Nursing from the University of Alicante
- ♦ Official Master's Degree in Nursing Sciences from the University of Alicante
- ♦ Emergency Department Nurse in Elche University General Hospital
- ♦ University Clinical Practice Tutor
- ♦ University-level teaching experience in Master's Degree programs and postgraduate courses
- ♦ University Expert in Primary Care Emergencies
- ♦ Degree in Emergency Medical Transportation (SAMU)

Faculty

Ms. Antón García, Gema

- ♦ University Diploma in Nursing (D.U.E.). Alicante University School of Nursing
- ♦ Nurse, Department of Allergology, Hospital General Universitario de Elche, Alicante
- ♦ University Clinical Practice Tutor
- ♦ Professional experience in Neonatology

Ms. Balboa Navarro, Ana

- ♦ Nurse, Emergency Department, Hospital General de Elche (Alicante)
- ♦ Official Master's Degree in Nursing Sciences Instructor in Basic Life Support and
- ♦ Advanced Cardiovascular Life Support, certified by the Spanish Society of Emergency Medicine (SEMES) and the American Heart Association (AHA)
- ♦ Instructor in Pediatric and Neonatal CPR, certified by the Spanish Group for Pediatric and Neonatal CPR (GERCPPN)
- ♦ Holder of the APLS Credential (Advanced Pediatric Life Support), awarded by the American Academy of Pediatrics and the American College of Emergency Physicians
- ♦ University-level teaching experience in Master's Degree programs and postgraduate courses



Ms. Berenguer Poveda, Nuria

- ◆ Nurse, Emergency Department, Hospital General de Elche
- ◆ Bachelor's Degree in Social and Cultural Anthropology, Miguel Hernández University (UMH)
- ◆ Teaching experience in Training workshops and postgraduate courses
- ◆ Co-author, together with other professionals, of "Nursing Guide to Survive in Emergency Care" Cascales Pérez, María Luisa
- ◆ Diploma in Nursing
- ◆ Graduate in Nursing
- ◆ Specialist in Family and Community Nursing
- ◆ Family and Community Nursing Resident Tutor
- ◆ Instructor in the Diploma in Health Education organized by SCELE at the Official College of Nursing of Alicante
- ◆ Speaker and presenter at multiple Nursing Congresses and Conferences
- ◆ Recipient of several awards for oral communications and scientific contributions at Nursing events

Dr. Durán Peñaloza, José María

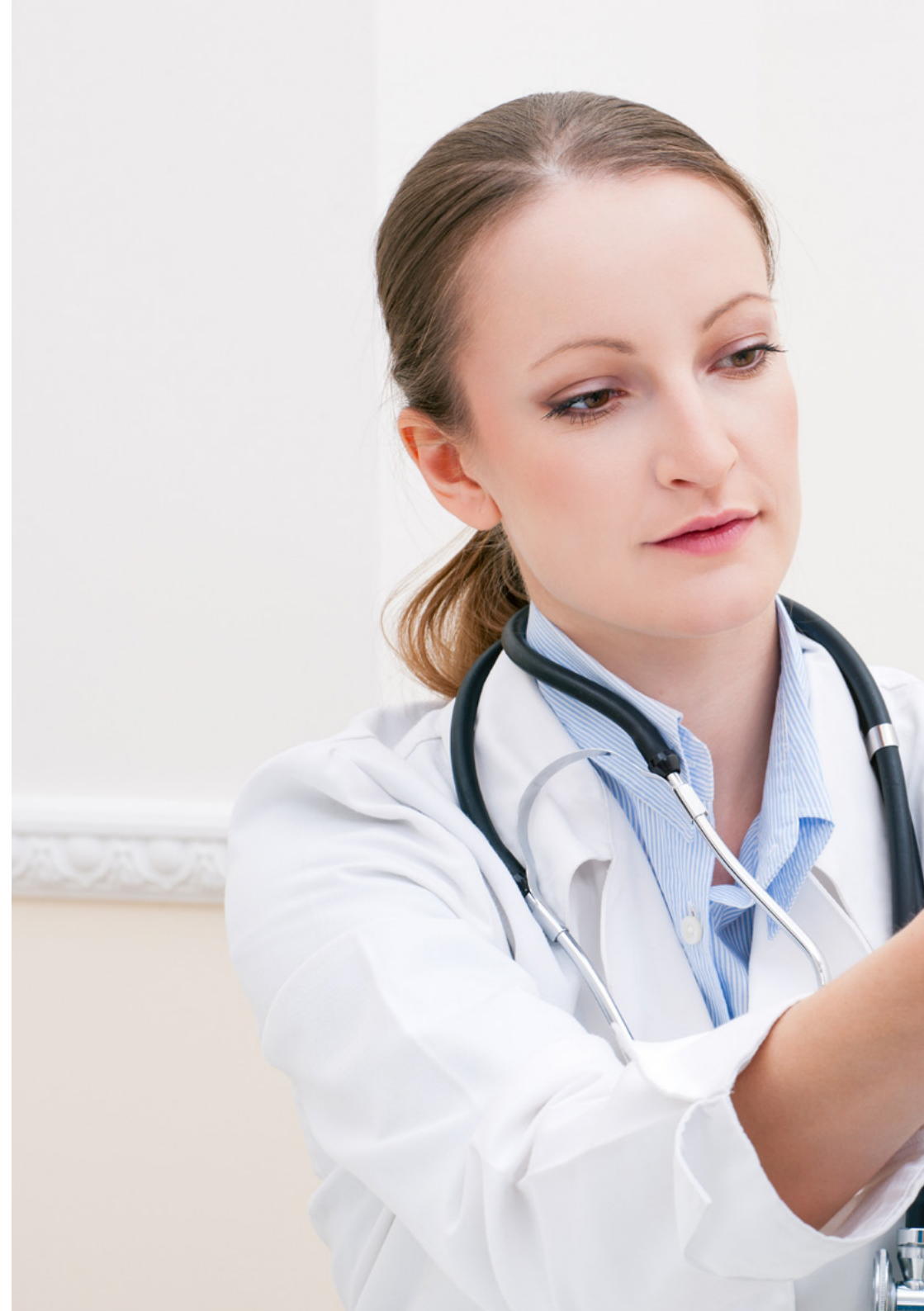
- ◆ Degree in Medicine from the University of Panama
- ◆ Physician, Mobile Medical Emergency Service (SEMM – Panama)
- ◆ Medical Coordinator, Valdezcaray Winter Ski Station (La Rioja, Spain)
- ◆ Advanced Life Support (ALS) Physician: Del Olmo Ambulances
- ◆ Advanced Life Support (ALS) Physician: DYA Navarra
- ◆ Instructor in medical emergency courses, DYA Navarra
- ◆ Internal Medicine Resident in Orthopedic Surgery and Traumatology at the General University Hospital of Elche, Alicante

Dr. Fernández Martínez, María Ángeles

- ♦ Medical Doctor, Specialist in Family and Community Medicine
- ♦ Consultant in the Emergency Department at Elda General Hospital
- ♦ Currently, Consultant in the Emergency Department at Elche General Hospital
- ♦ Certified in Advanced Medical Transport
- ♦ Lecturer in Master's Programs and Postgraduate Courses

Dr. González Tejera, Matilde

- ♦ Bachelor's Degree in Medicine and Surgery, Complutense University of Madrid
- ♦ Specialist in Family and Community Medicine (MFyC)
- ♦ Doctor of Medicine, Miguel Hernández University
- ♦ Diploma in Short-Stay Medical Units, EVES (Valencian School of Health Studies). CME Certified
- ♦ Certified in Emergency and Critical Care Medicine. Accredited by the Spanish Society of Emergency Medicine (SEMES)
- ♦ Senior Physician, Emergency Department, Hospital General Universitario de Elche
- ♦ Head of Teaching, Emergency Department, Hospital General Universitario de Elche
- ♦ Member of the Teaching Committee, Hospital General Universitario de Elche
- ♦ Hospital Tutor for Residents in Family and Community Medicine and Member of the Spanish Society of Emergency Medicine (SEMES)





Mr. Mas Manchón, José Manuel

- ♦ Nurse, General and Pediatric Emergency Department, General University Hospital of Elche, Alicante
- ♦ University Clinical Practice Tutor in the same department
- ♦ Co-author of the "Nursing Guide to Survive in Emergency Care" (Hospital General de Elche, Valencian Health Agency)
- ♦ Certified "Trainer of Trainers" Extensive teaching experience through various programs with the Spanish Red Cross and continuing education courses
- ♦ Head of the Training Area, Spanish Red Cross, Local Assembly of Crevillent

Mr. Rico Beltrán, César

- ♦ Diploma in Nursing, School of Nursing, Hospital General de Valencia
- ♦ Bachelor's Degree in Nursing, Hogeschool HZ Zeeland, Vlissingen (Netherlands)
- ♦ University Clinical Practice Tutor
- ♦ Coordinator of the Master's Degree in Specialization in Nursing Care, CEU Cardenal Herrera University, Elche
- ♦ Lecturer in General Pathology, Clinical Nursing I, and Fundamentals of Nursing at CEU Cardenal Herrera University, Elche
- ♦ Nurse, Emergency Department, Hospital General de Elche

Mr. Sabuco Hidalgo, José Ramón

- ♦ University Diploma in Nursing, University of Alicante
- ♦ Nurse, General and Pediatric Emergency Department, Hospital General Universitario de Elche, Alicante
- ♦ University Clinical Practice Tutor

Ms. Vicario Martínez, Ana María

- ♦ Bachelor's Degree in Nursing from the University of Soria
- ♦ Emergency Nurse at the General University Hospital of Elche (Alicante)
- ♦ University Clinical Practice Tutor
- ♦ Official Master's Degree in Nursing Sciences from University of Alicante

04

Structure and Content

The structure of the content has been designed by a team of professionals who understand the implications of nursing training in the emergency department. They are aware of the importance of up-to-date knowledge to provide quality care to patients and are committed to teaching through the use of new educational technologies.



“

This Postgraduate Certificate in Update on Cardiopulmonary Resuscitation and Invasive Techniques in the Emergency Department contains the most complete and up-to-date scientific program on the market”

Module 1. Hospital Emergency Services

- 1.1. Organization of Hospital Emergency Services
- 1.2. Nursing Records in the Emergency Department
- 1.3. Hospital Triage Systems

Module 2. Life Support

- 2.1. General Overview
- 2.2. Adult Basic Life Support and AED
- 2.3. Pediatric Basic Life Support and AED
- 2.4. Basic Electrocardiography and Arrhythmias
- 2.5. Adult Advanced Life Support
- 2.6. Pediatric Advanced Life Support
- 2.7. Neonatal Resuscitation
- 2.8. Resuscitation in Special Cases
- 2.9. Invasive Procedures and Techniques in the Emergency Department (Workshops)





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*A unique, essential and decisive
learning 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.

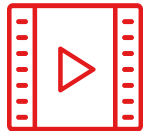
The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

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

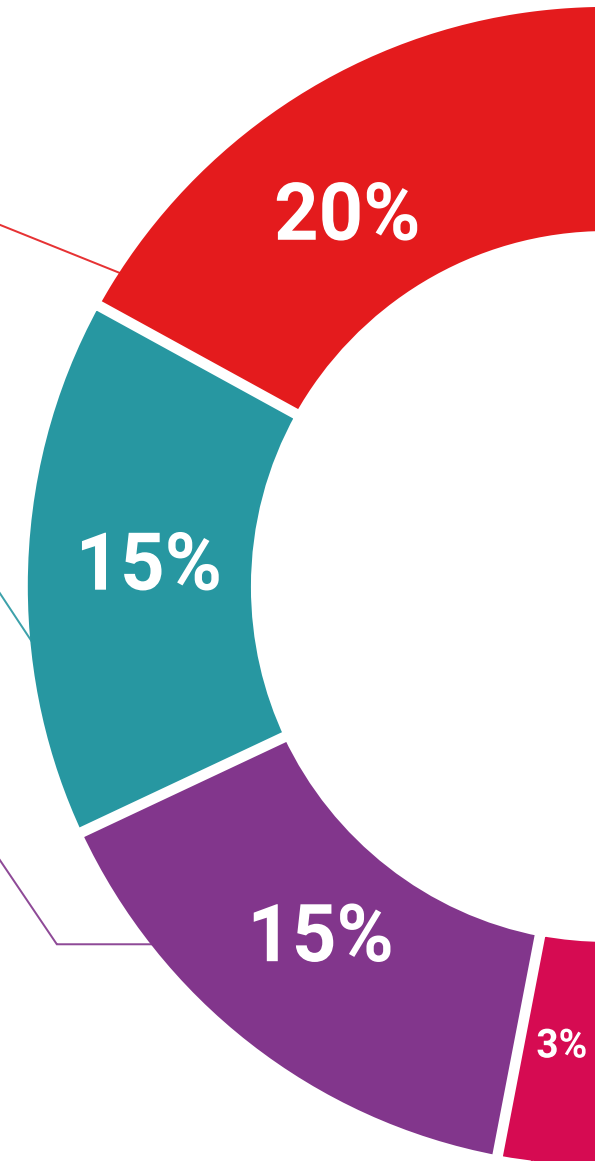
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

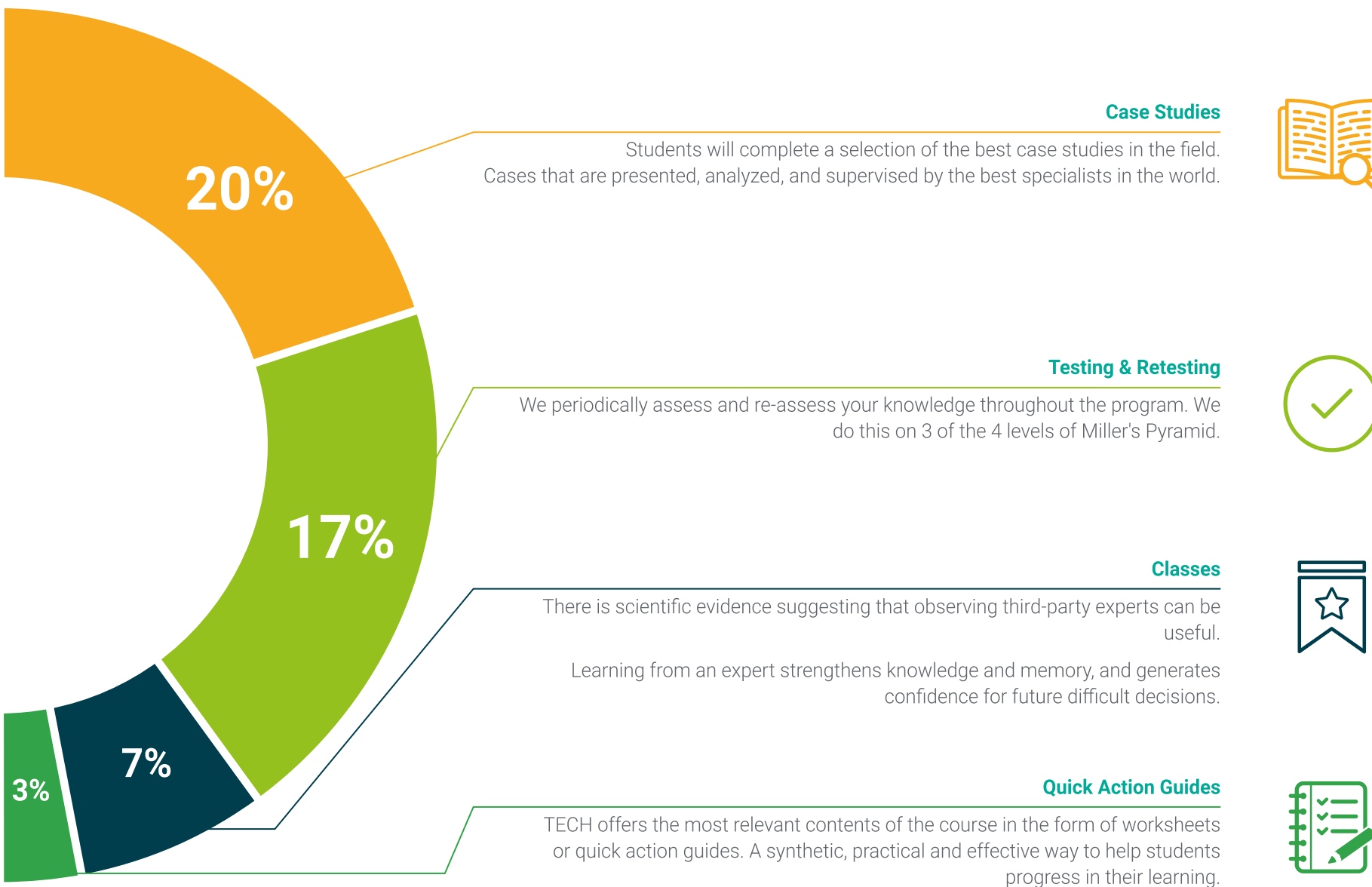
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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

The Postgraduate Certificate in Update on Cardiopulmonary Resuscitation and Invasive Techniques in the Emergency Department guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the 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 diploma for the **Postgraduate Certificate in Update on Cardiopulmonary Resuscitation and Invasive Techniques in the Emergency Department** 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.

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