



Postgraduate Certificate

Minimally Invasive Thoracic Surgery

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

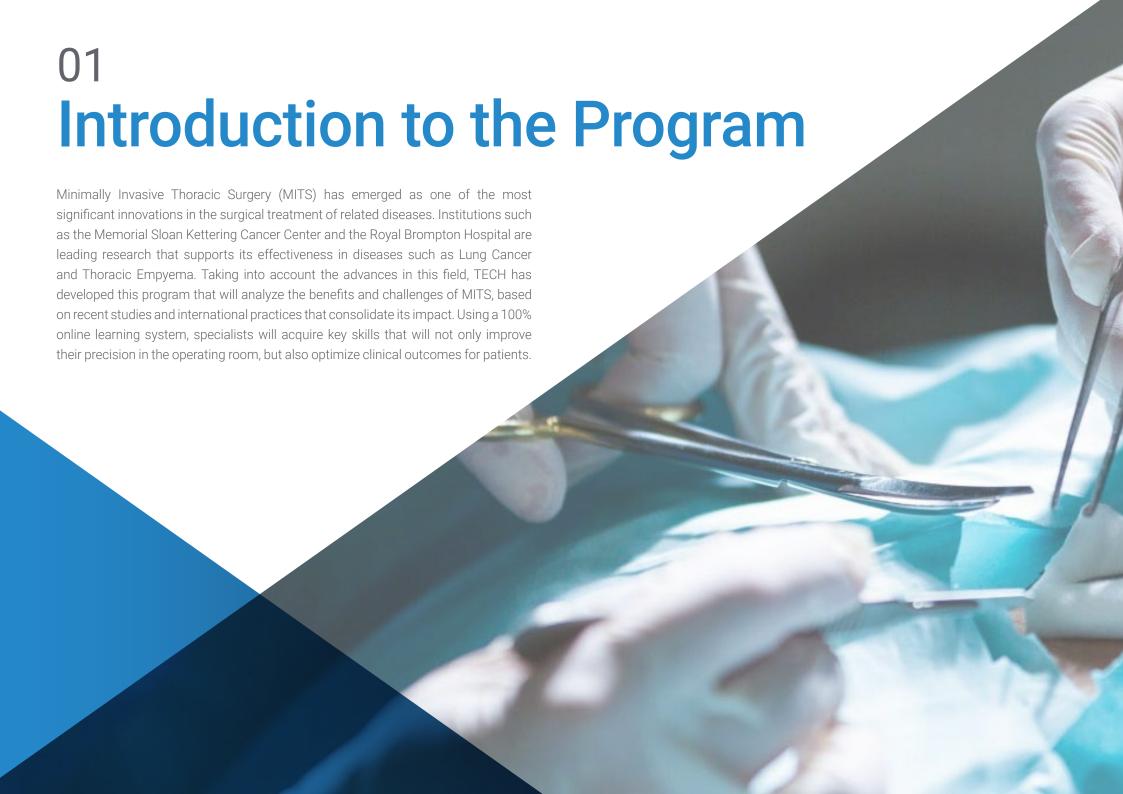
» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/minimally-invasive-thoracic-surgery

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Minimally invasive thoracic surgery represents a crucial advance in modern medicine, redefining the way in which various thoracic diseases are diagnosed and treated. In this sense, its relevance lies in the ability to offer safer, more precise and more effective surgical interventions, with a positive impact on both clinical results and the quality of life of patients. Unlike traditional approaches, this technique uses small incisions and advanced tools, such as high-resolution cameras and robotic devices, allowing the surgeon to work with greater precision in complex anatomical areas.

With this in mind, TECH has developed this program in Minimally Invasive Thoracic Surgery, which will offer professionals an in-depth knowledge of the most advanced techniques, such as Video-Assisted Thoracoscopic Surgery (VATS) and robotic procedures, which represent the gold standard in medicine today. Through a comprehensive and evidence-based approach, they will develop technical skills that will have a direct impact on their surgical performance. They will also know how to assess complex cases, select the most appropriate techniques according to the individual characteristics of each patient and improve their decision making in highly demanding surgical environments.

In the future, the knowledge acquired in this academic pathway will become an invaluable competitive advantage for the development of the graduates' careers. In this way, they will be better prepared to occupy leadership positions in surgical units, participate in research projects and collaborate with multidisciplinary teams in prestigious institutions. In addition, they will always be one step ahead, adapting to the new trends and demands of the healthcare sector.

In addition, the 100% online modality will offer a unique flexibility that adapts to the students' agenda, allowing them to advance at their own pace without the need to interrupt their careers. At the same time, this program will implement the Relearning methodology, a pedagogical approach that favors retention and deep understanding of concepts.

This **Postgraduate Certificate in Minimally Invasive Thoracic Surgery** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- The development of practical cases presented by experts with a deep knowledge of Minimally Invasive Thoracic Surgery
- The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- Practical exercises where the self-assessment 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



TECH's pedagogical model will not only guarantee you a high-level academic experience, but will also allow you to study at your own pace, getting the most out of your education"

Introduction | 07 tech

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In this online Postgraduate Certificate you will discover how Minimally Invasive Surgery transforms patients' lives. Get ready to lead innovative procedures and make a difference in the medical field!"

The program's teaching staff includes professionals from the sector who contribute their work experience to this specializing program, as well as renowned specialists from leading 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 education programmed to prepare for real situations.

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

With internationally renowned experts, you will learn the most advanced methods in Minimally Invasive Thoracic Surgery.

Become the professional who will redefine the future of surgery!

This program combines cutting-edge theory with case studies, giving you the expertise to excel in a field as specialized as Thoracic Surgery.







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The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



The most complete syllabus





World's
No.1

The World's largest
online university

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.









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Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

The top-rated university by its students

Students have positioned TECH as the world's toprated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.





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Module 1. Approach to Minimally Invasive Thoracic Surgery

- 1.1. Minimally Invasive Thoracic Surgery. Historical Aspects
 - 1.1.1. Evolution of Surgical Techniques
 - 1.1.2. Influence of Technology on the Development of Thoracic surgery
 - 1.1.3. Pioneers in Minimally Invasive Thoracic Surgery
- 1.2. Simulation and Experimental Surgery in Minimally Invasive Thoracic Surgery
 - 1.2.1. Simulation Models in Surgical Training
 - 1.2.2. Training Programs in Minimally Invasive Thoracic Surgery
 - 1.2.3. Ethics and Considerations in Experimental Surgery
- 1.3. Material for Minimally Invasive Thoracic Surgery
 - 1.3.1. Basic Surgical Instruments
 - 1.3.2. Specialized Surgical Instruments
 - 1.3.3. Imaging and Visualization Devices
- 1.4. Thoracic Robotic Surgery. Historical Development
 - 1.4.1. Development of the First Robotic Systems
 - 1.4.2. Learning Curve and Adoption in Clinical Practice
 - 1.4.3. Global Expansion of Robotic Surgery
- 1.5. Unique Systems and Aspects of Robotic Thoracic Surgery
 - 1.5.1. Components of the Robotic Surgical System
 - 1.5.2. Technical Advantages over Traditional Surgery and VATS
 - 1.5.3. Current Limitations and Challenges
- 1.6. Surgical Anatomy for Minimally Invasive Surgery
 - 1.6.1. Anatomical Structures Involved in Minimally Invasive Approaches
 - 1.6.2. Anatomical View in the Different Minimally Invasive Approaches
 - 1.6.3. Anatomical Limits in the Thorax in Minimally Invasive Surgery1.6.3.1. Thoracic Duct, Transcervical Approach
- 1.7. Single-port and Multiport Minimally Invasive Intercostal Approaches
 - 1.7.1. Single-port Approach
 - 1.7.2. Biportal Approach
 - 1.7.3. Multiportal Approach





Syllabus | 15 tech

- 1.8. Others Minimally Invasive Approaches. Subxiphoid, Video-assisted Mediastinoscopic, VAMLA, TEMLA
 - 1.8.1. Subxiphoid Approach
 - 1.8.2. VAMLA Approach
 - 1.8.3. TEMLA Approach
- 1.9. Ergonomics in Minimally Invasive Thoracic Surgery
 - 1.9.1. Space Distribution in the Operating Room
 - 1.9.2. Surgeon's Position in Minimally Invasive Thoracic Surgery
 - 1.9.3. Strategies to Reduce Fatigue and Improve Ergonomics
- 1.10. Indications and Advantages of Supine, Lateral or Prone Positioning in Minimally Invasive Thoracic Surgery
 - 1.10.1. Supine Approach
 - 1.10.2. Lateral Approach
 - 1.10.3. Prone Approach



Thanks to the education you receive here, you will be prepared to apply minimally invasive techniques with confidence, positioning yourself as a highly sought-after specialist in the modern surgical field"





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General Objectives

- Master advanced techniques of minimally invasive thoracic surgery applied to complex diseases
- Identify and select modern surgical technologies for specific thoracic procedures
- Apply anatomical and physiological knowledge in the planning of minimally invasive interventions
- Develop practical skills in the use of specialized equipment for thoracic surgery
- Assess the risks and benefits of minimally invasive techniques to optimize patient care
- Implement efficient surgical protocols to reduce complications and recovery times
- Promote effective interdisciplinary communication in surgical and medical teams
- Integrate clinical research into surgical practice to improve patient outcomes





Teaching Objectives | 19 tech



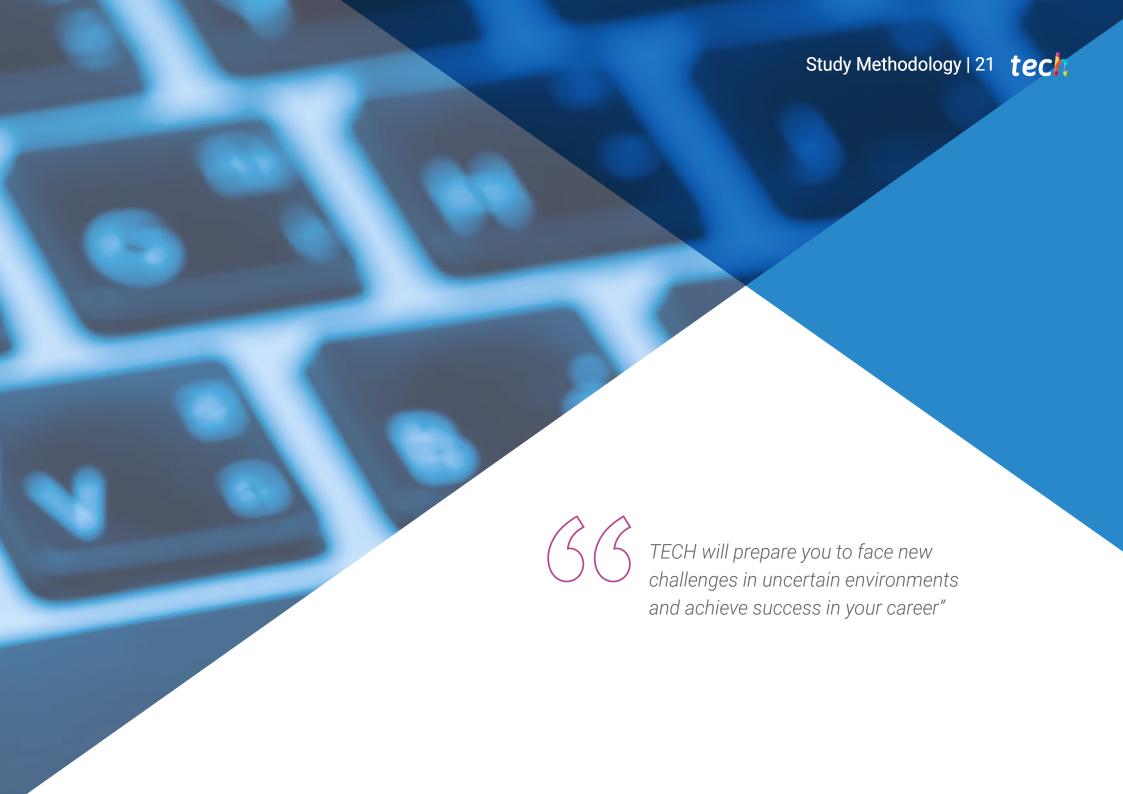
Specific Objectives

- Compile information on the historical evolution of minimally invasive thoracic surgery, highlighting key milestones and their impact on current practice
- Determine the main characteristics of the different intercostal (uniportal, multiport), subxiphoid or transcervical surgical approaches
- Demonstrate the importance of surgical ergonomics in the context of minimally invasive thoracic surgery, improving operative efficiency and patient safety
- Present recent technological innovations in thoracoscopic surgery and thoracic robotics



This program will enhance your technical excellence and understanding of the multidisciplinary benefits of MITS, positioning you as a leader in the evolution of modern Thoracic Surgery"



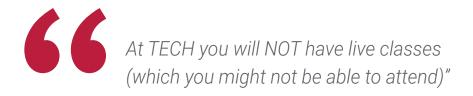


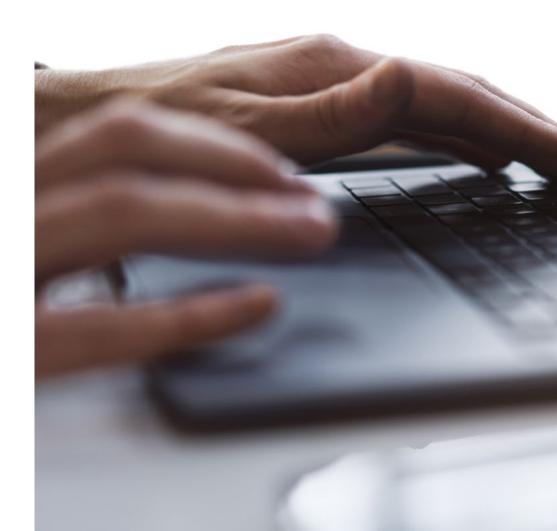
The student: the priority of all TECH programs

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

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.







The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.



TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"

tech 24 | Study Methodology

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.





A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

The effectiveness of the method is justified by four fundamental achievements:

- 1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
- **2.** Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

Study Methodology | 27 tech

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

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

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

As such, the best educational materials, thoroughly prepared, will be available in this program:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

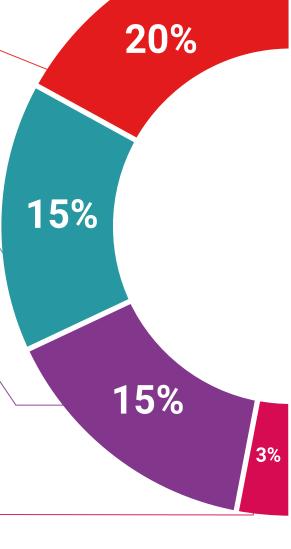
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

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

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





Additional Reading

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

Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting



We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

Classes



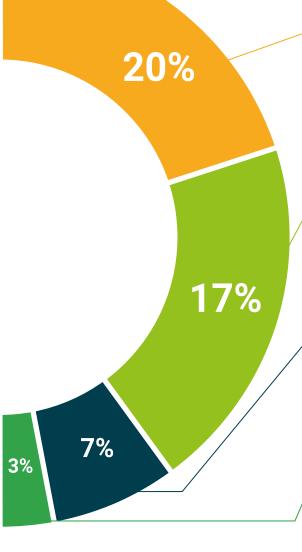
There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence for future difficult decisions.

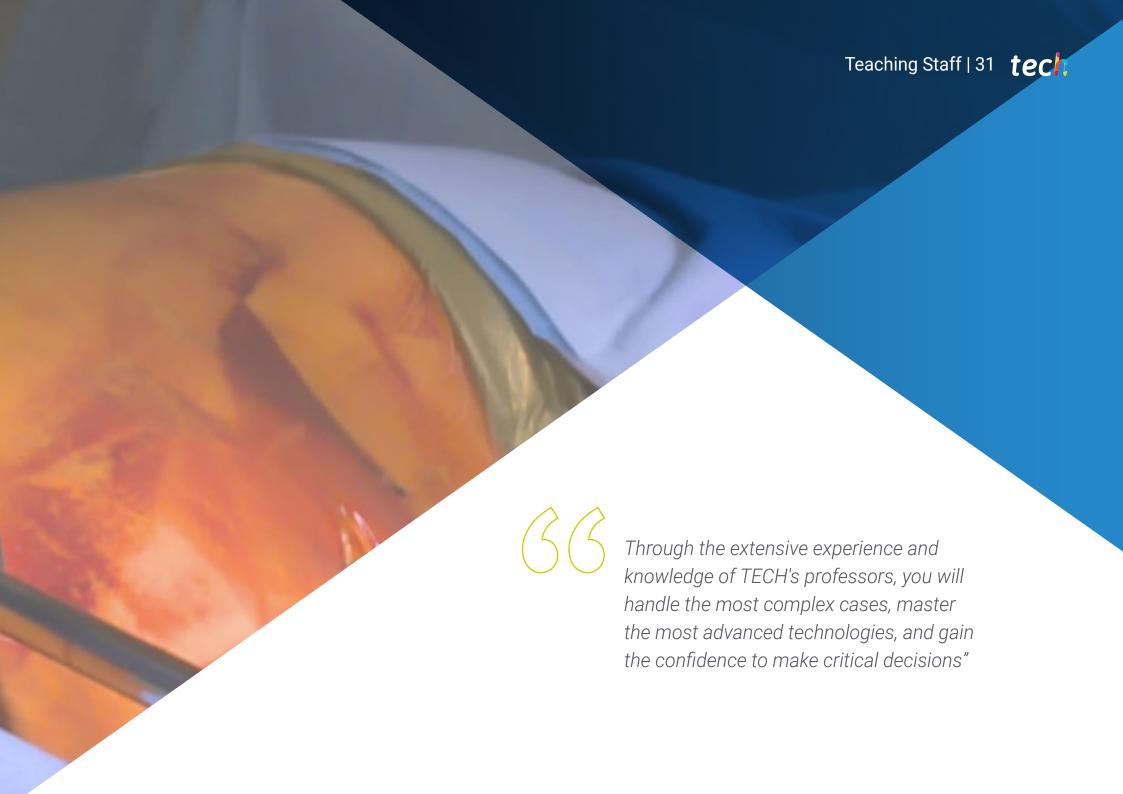
Quick Action Guides



TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.







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Management



Dr. Martínez Hernández, Néstor J.

- President of the Scientific Advisory Office of the Spanish Society of Thoracic Surgery (SECT)
- Coordinator of the Scientific Committee of the Spanish Society of Thoracic Surgery
- Thoracic Surgeon at the University Hospital La Ribera
- Thoracic Surgeon Editor of Cirugía Española in Elsevier
- Guest Editor at the Journal of Visualized Experiments
- Associate Professor at the Department of Respiratory Medicine, Faculty of Medicine, Catholic University of Valencia
- Thoracic Surgeon at the Manises Hospital
- Visiting Physician at Cedars-Sinai Medical Center
- Resident Medical Intern at the General University Hospital of Valencia
- Visiting Physician at Mount Sinai Hospital, New York, United States
- Visiting Physician at Yale New Haven Hospital, United States
- Doctor of Medicine and Surgery from the University of Valencia
- Degree in Medicine and Surgery from the University of Valencia
- Specialist in Thoracic Surgery
- Extraordinary Doctorate Award from the University of Valencia
- Antonio Caralps y Masso Award of the SECT for the Best Communication in Thoracic Surgery
- First Prize of IX Edition to the Best Specialist in Training at the Gregorio Marañón General University Hospital
- Member of: European Society for Thoracic Surgery (ESTS), Spanish Society of Thoracic Surgery (SECT), Spanish Society of Pulmonology and Thoracic Surgery (SEPAR), Valencian Society of Pulmonology (SVN)



Dr. Quero Valenzuela, Florencio

- Chief of the Thoracic Surgery Department at the Virgen de las Nieves University Hospital
- Specialist Physician in Thoracic Surgery at the Virgen de las Nieves University Hospital
- Specialist Physician in Thoracic Surgery at the Virgen Macarena University Hospital
- Member of the Ae22-Cancer Genetics, Biomarkers and Experimental Therapies Research Group
- Doctor of Surgery from the University of Granada
- Master's Degree in Clinical Unit Management from the University of Murcia
- Expert in Epidemiology and Clinical Research from the University of Granada
- Bachelor's Degree in Medicine and Surgery from the University of Granada

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Professors

Dr. Cilleruelo Ramos, Ángel

- Thoracic Surgeon at the Clinical University Hospital of Valladolid
- Member of the Institutional Relations Committee of the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR)
- Treasurer of the Castile-Leon and Cantabria Society of Respiratory Pathology (SOCALPAR)
- Medical Intern Resident in Thoracic Surgery at the University Clinical Hospital of Valladolid
- Doctor of Medicine from the University of Valladolid
- Master's Degree in Airway Diseases from the San Antonio Catholic University of Murcia
- Master's Degree in Healthcare Unit Management from the Menéndez Pelayo International University
- Master's Degree in Innovation and New Technologies Applied to Respiratory Medicine from the San Pablo CEU University
- University Expert in Pleural Pathology from the University of Barcelona
- University Expert in Emergencies in Thoracic Surgery from the Catholic University of Valencia
- Member of: Spanish Society of Pulmonology and Thoracic Surgery (SEPAR) and Castile-Leon and Cantabria Society of Respiratory Pathology (SOCALPAR)





Dr. Fuentes Martín, Álvaro

- Coordinator of the MIR Committee in the Spanish Society of Thoracic Surgery
- Specialist Physician of Thoracic Surgery at the University Clinical Hospital of Valladolid
- Member of the National Commission of the Specialty of Thoracic Surgery in the Ministry of Health
- PhD in Health Sciences Research from the University of Valladolid
- Resident Physician in Thoracic Surgery at the University Clinical Hospital of Valladolid
- Degree in Medicine from the Complutense University of Madrid
- Member of: Spanish Society of Thoracic Surgery (SECT)



All the lecturers on this program have extensive experience, offering you an innovative perspective on the main advances in this field of study"





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This private qualification will allow you to obtain a diploma for the **Postgraduate Certificate in Minimally Invasive Thoracic Surgery** 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 Minimally Invasive Thoracic Surgery

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

Postgraduate Certificate in Minimally Invasive Thoracic Surgery

This is a private qualification of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



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

health confidence people education information tutors guarantee accreditation teaching institutions technology learning



Postgraduate Certificate

Minimally Invasive Thoracic Surgery

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

