



# Postgraduate Certificate

# Valvular Pathology

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

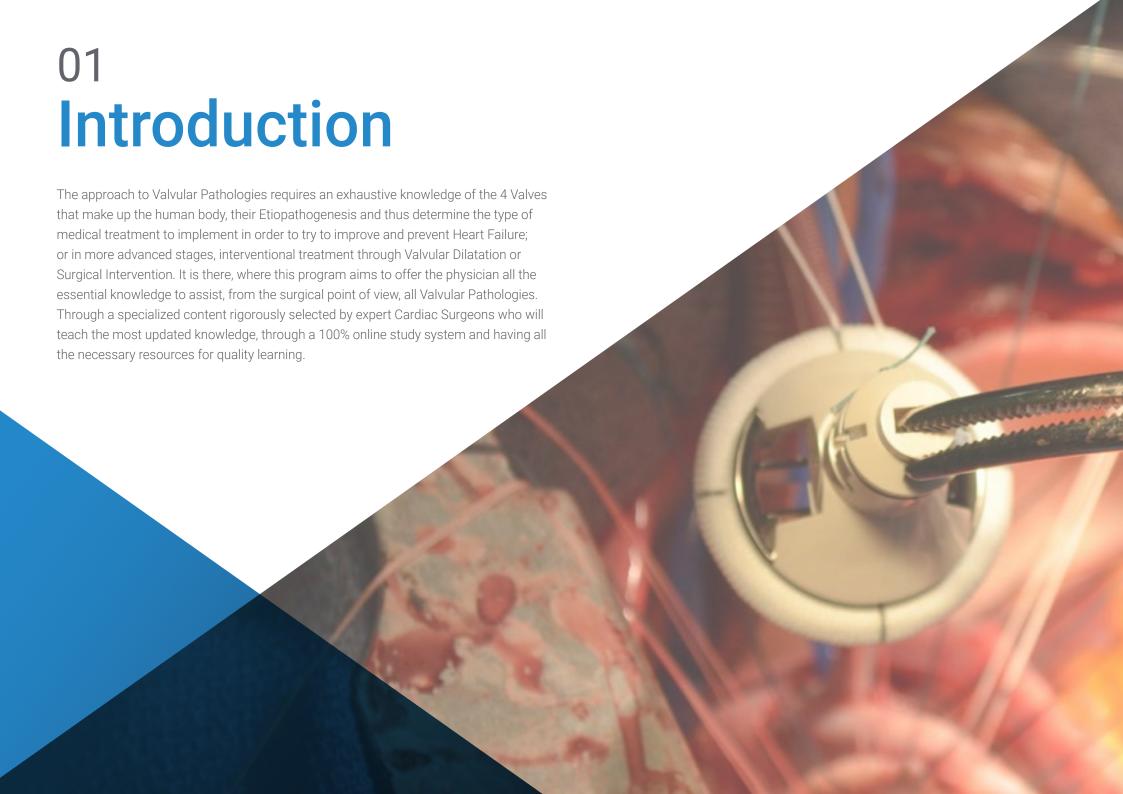
Website: www.techtitute.com/in/medicine/postgraduate-certificate/valvular-pathology

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# tech 06 | Introduction

Heart Valve Disease can be congenital, as well as occur in adults due to many causes, such as Infections and other Heart Conditions. A disease that can cause many complications. Therefore, acquiring the essential knowledge to approach, from the surgical point of view, all Valvular Pathologies is a subject of interest for the specialist in the area of Cardiology and Cardiac Surgery.

In this Postgraduate Certificate in Valvular Pathology, the pathologies related to the valves and their causes are studied in depth. Reference is made to the best approach to Valvulopathies through specific units and the importance of the *Heart Team* for decision-making. Thus, it deepens in the Physiopathology of each Valve, in Endocarditis and in all the Surgical Techniques for its treatment, including Mini-Incision Surgery. Finally, a review of the most relevant studies on the results of the different types of prostheses and surgical techniques is presented.

All this, through a completely online study system, which provides flexibility to the practitioner by being able to connect from any device and adjusting the schedule of your choice, obtaining the degree in 6 weeks. With the contents available from the first day, 24 hours a day and designed under an innovative methodology of reiterative character, the *Relearning*. This method is characteristic of TECH's programs and has benefited millions of students around the world.

This **Postgraduate Certificate in Valvular Pathology** is the most comprehensive and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by Cardiology experts
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- 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



The agenda of this program delves into the Physiopathology of each Valve, Endocarditis and all the Surgical Techniques for its treatment, including Mini-Incision Surgery"



This Postgraduate Certificate made to the best approach to Valvulopathies through specific units and the importance of the Heart Team in the Development of decision making"

TECH offers a large community of students and professors, which gives you the opportunity to share multicultural and multidisciplinary experiences.

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

It delves into the pathologies related to the valves and their causes.







# tech 10 | Objectives



# **General Objectives**

- Deepen the knowledge of Valvular Pathology and their forms of treatment
- Analyze the importance of new technologies involved in the management and control of cardiac pathologies and imaging techniques
- Obtain the necessary knowledge to improve patient recovery, avoid complications and reduce mortality
- Obtain the most up-to-date knowledge to approach in an integral way and from the surgical point of view, as appropriate, all the Valvular Pathologies









# **Specific Objectives**

- Understand the surgical approach to valvular pathologies
- Deepen in the causes of valvular pathologies and their treatment
- Understand the importance of the *heart team* in decision making in the approach to valvular pathologies
- Deepen in all surgical techniques for its treatment, including mini-incision surgery
- Evaluate different results of the different types of prostheses and surgical techniques used







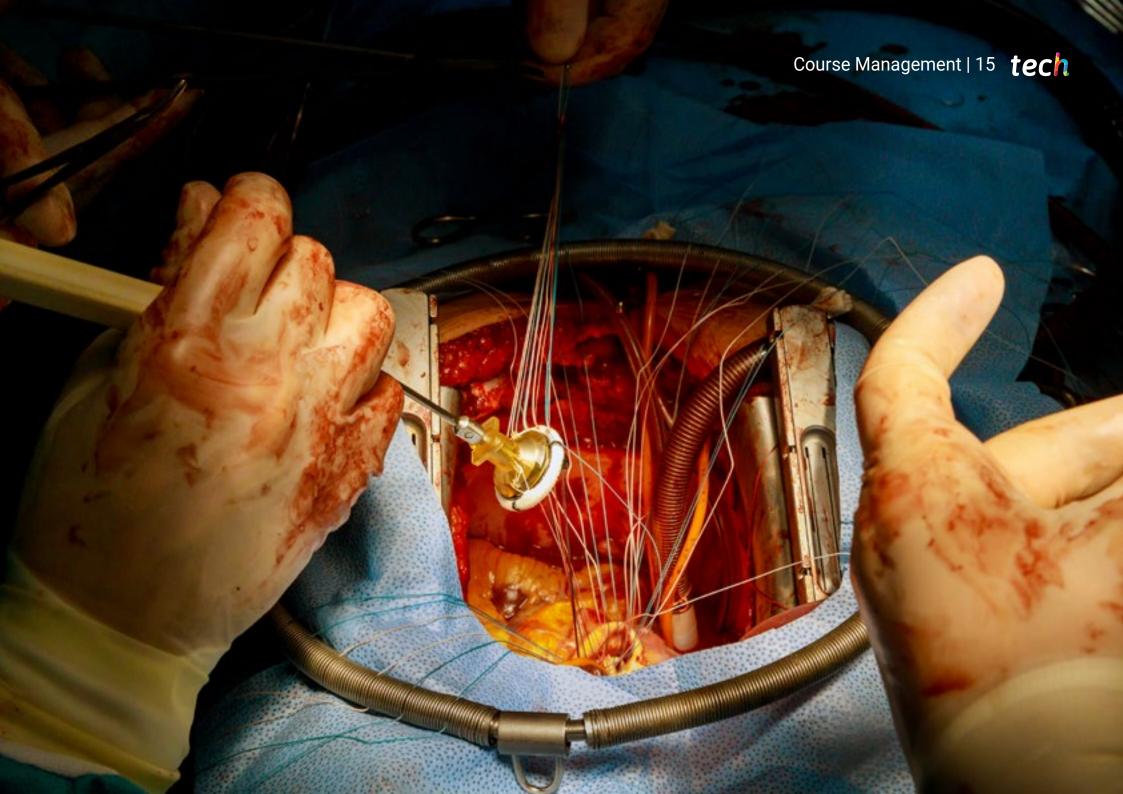
# tech 14 | Course Management

#### Management



#### Dr. Rodríguez Roda, Jorge

- Head of Cardiac Surgery Service by competitive examination. Ramón y Cajal University Hospital
- Cardiac Surgeon of the Cardiac Surgery Unit. Montepríncipe Madrid Hospital HM Group
- Professor Collaborating in the Department of Surgery. Alcalá de Henares University
- · Assistance Coordinator of the Cardiovascular Surgery Service. Gregorio Marañón General University Hospital
- Attending Physician of Cardiovascular Surgery. Gregorio Marañón General University Hospital
- Attending Physician of Cardiovascular Surgery Gómez Ulla Central Defense Hospita
- Attending Physician of Cardiovascular Surgery Hospital del Aire (Madrid)
- Resident physician of the Cardiovascular Surgery specialty in the Cardiovascular and Thoracic Surgery Service. Puerta de Hierro University Hospital (Madrid)
- Medical Officer of the Common Bodies of Defense
- Member of important scientific committees in Europe, Speaker and moderator of a variety of congresses and events related to cardiac surgery
- Author and contributor to countless publications, journals and books aimed at the medical community related to cardiac surgery
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Executive Master's Degree in Healthcare Organization Management ESADE
- Healthcare Organization Leadership Program at Georgetown University. USA
- Resident Medical Intern in the specialty of Cardiovascular Surgery in the Department of Cardiovascular and Thoracic Surgery, Hospital Puerta Hierro, Autonomous University of Madrid
- Diploma of Advanced Studies (DEA) of the Department of Surgery of the Faculty of Medicine of the Complutense University of Madrid
- General Practitioner in the Spanish National Health System and in the Public Social Security Systems of the Member States of the European Communities
- Military Health Corps



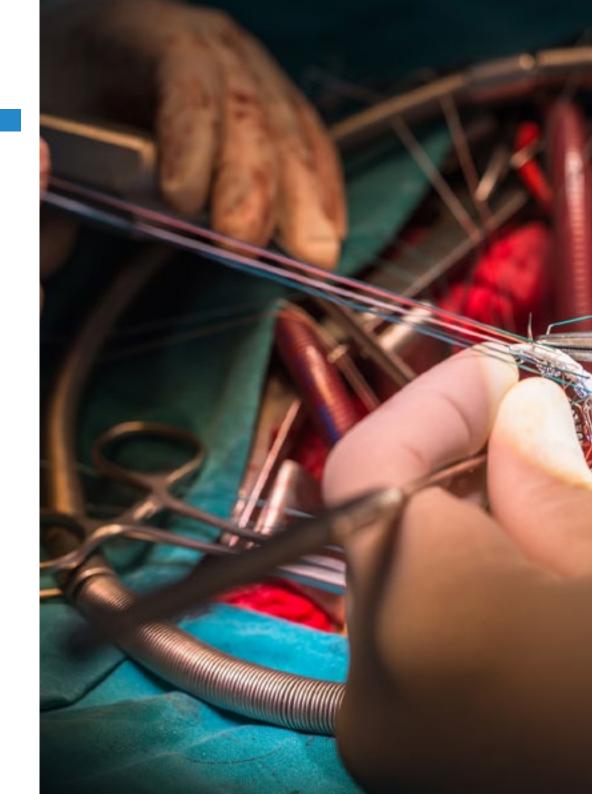


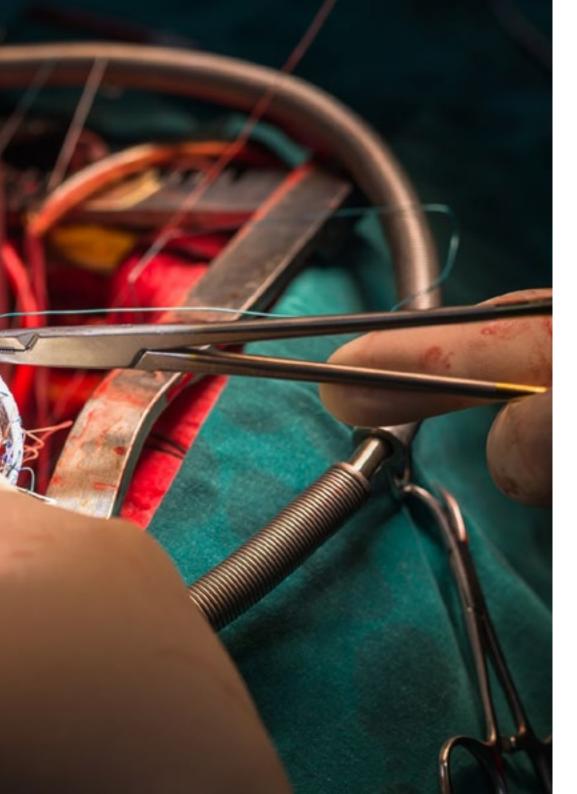


# tech 18 | Structure and Content

#### Module 1. Valvular Pathology

- 1.1. Etiopathogenesis.
- 1.2. Valvular Heart Team Specific Units
- 1.3. Types of Valve Prostheses
  - 1.3.1. Historical Evolution of Valve Prostheses
  - 1.3.2. Mechanical Prostheses
  - 1.3.3. Biological Prostheses
  - 1.3.4. Homograft
  - 1.3.5. Xenografts
  - 1.3.6. Autograft
- 1.4. Mitral Valve
  - 1.4.1. Anatomy and Function
  - 1.4.2. Pathophysiology
  - 1.4.3. Replacement and Repair Techniques
- 1.5. Tricuspid Valve
  - 1.5.1. Anatomy and Function
  - 1.5.2. Pathophysiology
  - 1.5.3. Replacement and Repair Techniques





### Structure and Content | 19 tech

- 1.6. Aortic Valve
  - 1.6.1. Anatomy and Function
  - 1.6.2. Pathophysiology
  - 1.6.3. Replacement and Repair Techniques
- 1.7. Pulmonary Failure
  - 1.7.1. Anatomy and Function
  - 1.7.2. Pathophysiology
  - 1.7.3. Replacement and Repair Techniques
- 1.8. Mini-invasive Surgery
- 1.9. Results of Valvular Surgery Studies
- 1.10. Endocarditis
  - 1.10.1. Etiology
  - 1.10.2. Indications
  - 1.10.3. Risk Factors
  - 1.10.4. Treatment



The most innovative methodology in a 100% online system facilitates the development of your learning. Enroll Now"





# tech 22 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.



Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

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

- Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate 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.





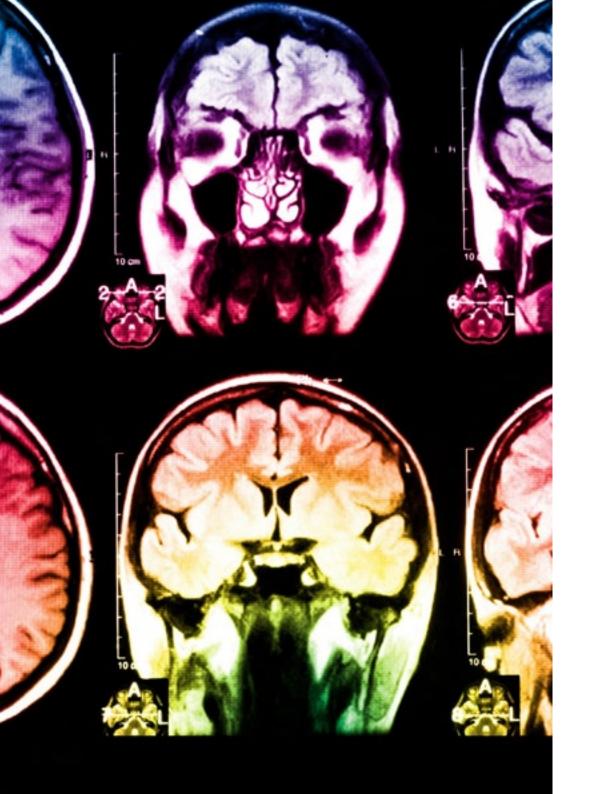
#### Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.





### Methodology | 25 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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.

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.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

# tech 26 | Methodology

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.



#### **Surgical Techniques and Procedures on Video**

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### **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".





#### **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.

### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **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.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts.

The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in 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.









# tech 30 | Certificate

This **Postgraduate Certificate in Valvular Pathology** is the most comprehensive and up-to-date scientific program on the market.

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

The certificate 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 Valvular Pathology Official N° of hours: 150 h.



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



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