



# Postgraduate Certificate

# Surgical Instrumentation and Sutures

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nursing/postgraduate-certificate/surgical-instrumentation-sutures

# Index

> 06 Certificate

> > p. 28





# tech 06 | Introduction

Nursing professionals who performs instrumentalist functions in the operating room must be perfectly familiar with the environment in which they performs their work, which implies an exhaustive knowledge of the equipment and apparatus, surgical asepsis and, of course, of the surgical instruments used during interventions.

Prior knowledge of surgical instruments will have a direct impact on the quality of care, as it will ensure better quality and safety in the provision of services by the nursing staff.

This Postgraduate Certificate aims to provide students with the necessary knowledge about the different instrument nomenclature, their usefulness and application, assembly and handling, need-based selection, as well as their care and maintenance. Furthermore, students will learn the basic principles and most common techniques of surgical suturing, its qualities and indications, so that they can put them into practice in any surgical process in the performance of their work.

This **Postgraduate Certificate in Surgical Instrumentation and Sutures** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Clinical cases presented by experts
- 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
- A review of the most important aspects of instrumentation procedures and their implication in the surgical process
- The most up-to-date surgical suturing techniques and the latest surgical equipment and materials
- 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 be able to
up to date your knowledge of
surgical patient care, improve
prognosis and reduce sequelae
and complications in surgery"



This Postgraduate Certificate is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Surgical Instrumentation and Sutures you will obtain a certificate issued by TECH Technological University"

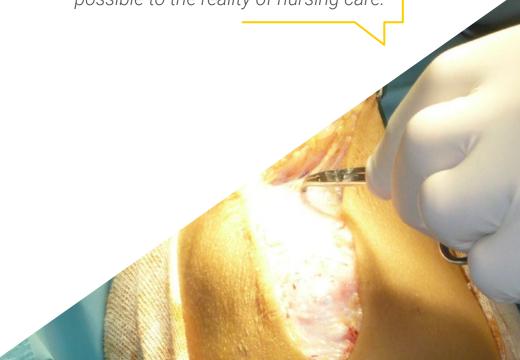
Its teaching staff includes leading nursing professionals, who contribute their work experience to this up to date program, in addition to other professionals specializing in the surgical area.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare in real situations.

This program is designed around Problem-Based Learning, whereby nursing professionals 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.

The Postgraduate Certificate will allow you to practice in simulated environments, which will provide an immersive learning programmed to train in real situations.

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







# tech 10 | Objectives



# **General Objective**

• Up to date nursing professionals on the most important concepts in instrumentation and needles in the context of surgical sutures, as well as on suturing techniques and surgical suture removal



Make the most of this opportunity and take the step to get up-to-date on the most important aspects of Surgical Instrumentation and Sutures"





# Objectives | 11 tech



# **Specific Objectives**

- Recognize and classify the general and specific surgical material and instruments in each speciality, based on their functionality
- Analyze the textile, consumable and prosthetic materials used in surgical interventions
- Master how to clean the instruments before sending them to sterilization
- Apply new technologies to surgical instrumentation
- Know how to use the latest trends in surgical instrumentation
- Master the classification and characteristics of suture threads
- Analyze how surgical needles function
- Delve into suture techniques and indications
- Know how to remove surgical sutures: equipment, material, procedure and final considerations
- Identify how surgical needles are assembled





# tech 14 | Course Management

#### Management



#### Ms. Diaz Torrijos, María José

- Nursing supervisor of the General Surgery Department at 12 Octubre Hospital
- Cardiology Service, Fundación Alcorcón University Hospital
- Operating Room Services, 3rd General Residency at Fuenlabrada University Hospital
- Specialist Nursing Qualification in Pediatric Nursing from the Ministry of Culture, Education and Sports
- Master's Degree in Nursing Management from European University of Madrid
- University Expert in Management and Quality of Care from the Nursing Leadership by FUDE
- Degree in Nursing from the "Puerto de Hierro" University School of Nursing, Autonomous University of Madrid

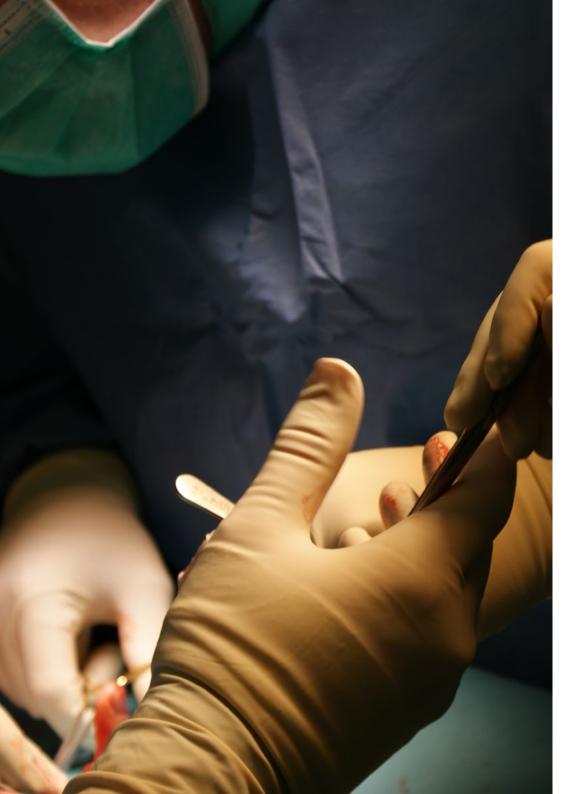
#### **Professors**

#### Ms. Ranz González, Raquel

- Surgical Nurse
- Surgical Nurse in various specialities at Gregorio Marañon Hospital
- Surgical Nurse in various specialties at 12 de Octubre Hospital
- Participation in the subcommissions of Surgical Protocols and Accounting protocol revision at 12 de Octubre University Hospital
- Co-author of several communications and scientific presentations for national events and congresses of the guild
- Diploma and Degree in Nursing from the Complutense University of Madrid

#### Mr. Garcia Del Campo, Gabriel

- Operating Room Service in the Abdominal Organ Transplantion Unit at the 12 de Octubre University Hospital Madrid
- Official Specialist Nurse Qualification in Pediatric Nursing. Ministry of Education of Spain
- University Diploma in Nursing. San Pablo University CEU, Madrid
- Virgen del Mar Hospital, Madrid. Operating Room and Intensive Care Services



# Course Management | 15 tech

#### Mr. García Ortega, Eduardo

- Surgical Block Nurse, 12 de Octubre University Hospital, Madrid
- Surgical Nurse at the Moncloa Hospital in Madrid
- Surgical Nurse at the Nuevo Parque Clinic in Madrid
- Diploma in Nursing from the Complutense University of Madrid
- Postgraduate course in Operating Room and Anesthesia at Rey Juan Carlos University

#### Ms. Sanz Hernándes, Natalia

- Surgical Nurse in Maxilofacial, Trauma and Orthopedics at 12 de Octubre University Hospital of Madrid
- Operating Room Nurse, Thoracic and Cardiovascular, Otorhinolaryngology, and Neurosurgery at the 12 de Octubre University Hospital in Madrid
- Diploma in Nursing from the University of Valladolid
- Adaptation course to the Degree in Nursing at the University of León

#### Ms. Esteban Saori, Patricia

- Surgical Nurse in the Lung Transplantion Team at 12 de Octubre University Hospital
- Surgical Nurse in the Oncology and Gynecology Unit at the 12 de Octubre University Hospital
- Diploma in Nursing from the Autonomous University of Madrid at the Jiménez Díaz Foundation School of Nursing





## tech 18 | Structure and Content

#### Module 1. Surgical Instrumentation

- General Aspects. Surgical Timing. Surgical Instruments: Characteristics, Parts, Classification and Indications
- 1.2. Arrangement of Surgical Instruments and Other Materials on the Instrumentation Table(s). Instrument Care and Management
- 1.3. Presenting Basic and General Surgical Instruments Instrumentation Techniques
- 1.4. Textile, Disposable and Prosthetic Materials. Surgical Specialties. Instrument Cleaning and Preparation prior to Sterilization Referral
- 1.5. "Silent" Instrumentation. Role of Nurses in New Technologies
- 1.6. Surgical Field Set-Up and Sterile Field Preservation in Laparoscopy
- 1.7. Basic Instruments in Laparoscopy
- 1.8. Nursing Staff Intervention in Laparoscopic Surgery
- 1.9. Safety Activities in Surgical Instrumentation
- 1.10. Robots. New Colleagues in the Operating Room. Da Vinci System

#### Module 2. Surgical Sutures

- 2.1. History and Definition of Suture
- 2.2. Classification and Characteristics of Suture Thread
- 2.3. Surgical Needles
- 2.4. Anatomy of a Surgical Needle Practical Aspects of Use
- 2.5. Suture Techniques, Indications and Removal
- 2.6. Hemorrhages and Healing Phases
- 2.7. Types of Surgical Suture
- 2.8. Suture Anesthesia
- 2.9. Surgical Suture Care at Home







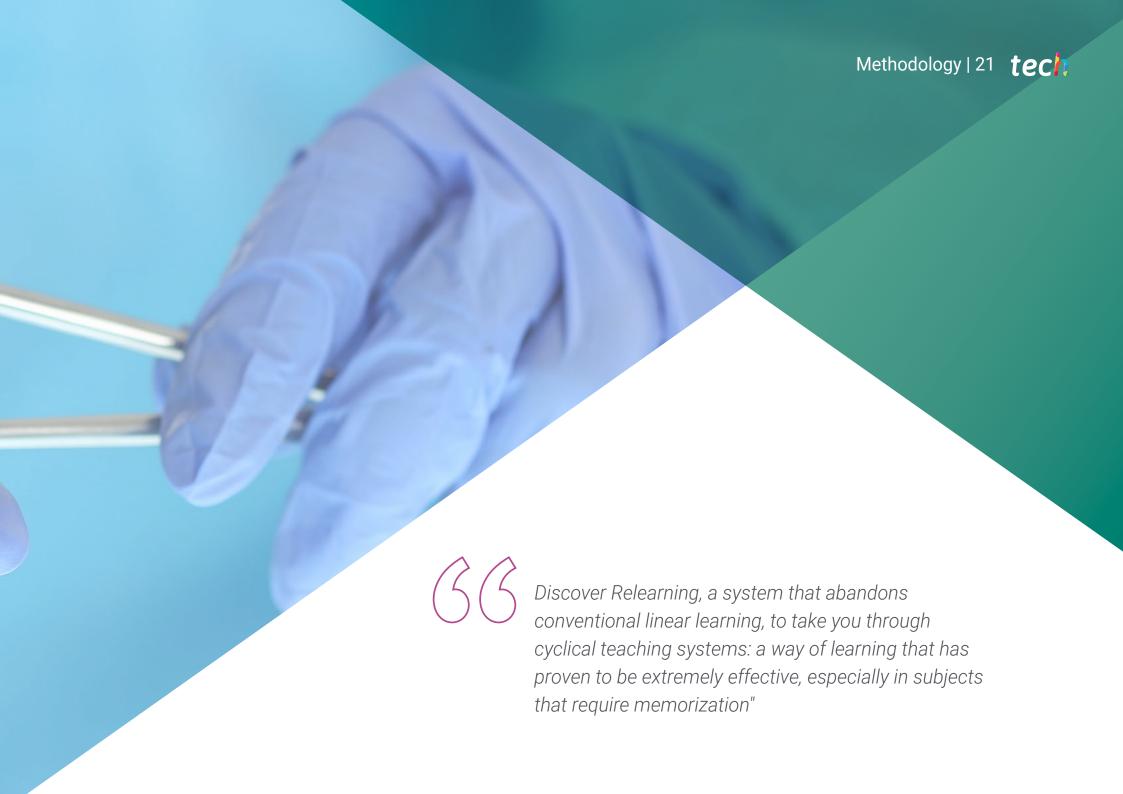
A unique, key, and decisive educational experience to boost your professional development"





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.



# tech 22 | Methodology

#### At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing 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:

- Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
- 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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The nurse will learn through real cases and by solving 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 we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. 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.

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 really 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.



#### **Nursing Techniques and Procedures on Video**

We introduce you to the latest techniques, to the latest educational advances, 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 them as many times as you want.



#### **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.



### **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 suggesting that observing third-party experts can be useful.

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.





20%

17%





# tech 30 | Certificate

This Postgraduate Certificate in Surgical Instrumentation and Sutures contains the most complete and up-to-date scientific 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 Surgical Instrumentation and Sutures Official No of Hours: 300 h.



#### Surgical Instrumentation and Sutures

This is a qualification awarded by this University, equivalent to 300 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.

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



# Postgraduate Certificate Surgical Instrumentation and Sutures

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

