



# Postgraduate Certificate

# Preoperative Preparation and Infection Control

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We b site: www.techtitute.com/us/nursing/postgraduate-certificate/preoperative-preparation-infection-control

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# tech 06 | Introduction

The main objective of preoperative assessment is to reduce surgical morbidity and mortality, trying to determine and improve as much as possible the risk of complications. The role of nursing in this phase is to prepare patients undergoing surgery, identify their needs and ensure adequate patient education.

One of the objectives of this Postgraduate Certificate is to provide students with the ability to perform a preoperative assessment to identify physical and psychological risk factors in the patient, thus reducing postoperative complications. Furthermore, students will be able to identify possible feelings of anguish and anxiety in the patient derived from entering the surgical area, so that they can offer the necessary help in these moments, providing information, safety and confidence.

Every healthcare facility with a surgical area should have a surgical site infection surveillance and prevention program adapted to its characteristics and activity, and all operating room personnel should be responsible for applying strict aseptic principles to minimize risk and comply with established protocols.

This **Postgraduate Certificate in Preoperative Preparation and Infection Control** contains the most complete and up-to-date scientific program on the market. The most important features of the Postgraduate Certificate are:

- Clinical cases presented by 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.
- A review of the most important aspects of the preoperative phase in the surgical process.
- Updated nursing and infection control surgical procedures.
- 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 update your knowledge of Preoperative Preparation and Infection Control, improve prognosis and reduce sequelae and complications in surgery."



This Postgraduate Certificate may be the best investment you can make when choosing a refresher program for two reasons: in addition to updating your knowledge of Preoperative Preparation and Infection Control, you will obtain a qualification from 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 Hospital Emergency Services.

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 an immersive training program to train in real 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 Postgraduate Certificate 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 program's degree as close as possible to the reality of care in Nursing.





# tech 10 | Objectives



# **General Objective**

• Update nursing professionals who perform their care functions in the surgical area, following the principles of nursing methodology, in order to provide quality care to surgical patients in the preoperative phase of interventions, as well as infection control throughout the whole process.







#### **Specific Objectives**

- Identify the patient's possible psychological responses to surgery.
- Explain the importance of patient communication to improve quality of care and reduce postoperative risks.
- Define the necessary communication skills to care for surgical patients in an appropriate and personalized way.
- Describe preoperative nursing care.
- Identify special considerations in relation to diabetic, obese, pediatric, geriatric and terminal patients.
- Define the skills needed in initial patient assessment for preoperative surgery.
- Explain the importance of informed consent and accepting the intervention.
- Learn the concepts of asepsis and antisepsis.
- Explain the need for sterile technique in infection control.
- Describe central sterilization services.
- Learn the sterilization process.
- Identify the biological processes not associated with the sterilization process.

Seize the opportunity and take the step to get up-to-date on the most important aspects of Preoperative Preparation and Infection Control.





# tech 14 | Course Management

#### **Guest Director**



#### Ms. Diaz Torrijos, María José

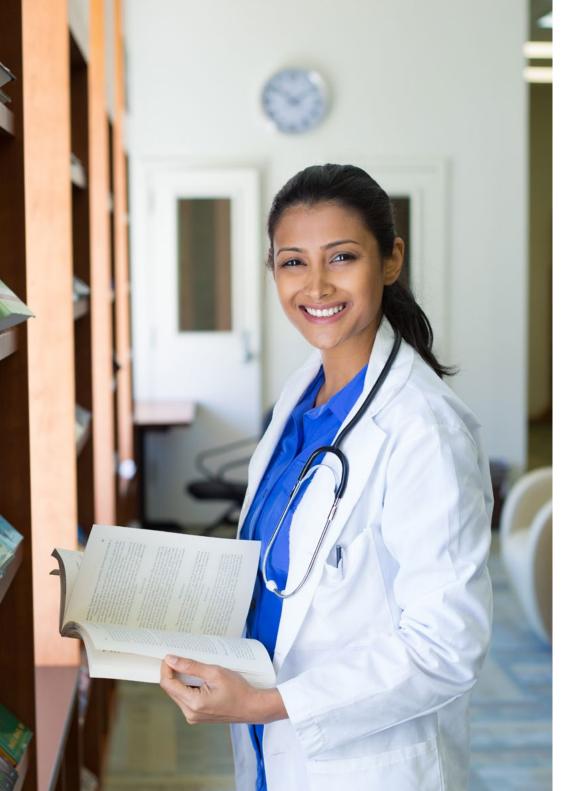
- Nursing supervisor in the General Surgery Department at 12 Octubre Hospital 2019-present.
- Pediatric Services at Fuenlabrada University Hospital (Madrid) 2004-2011
- Operating Room Services, 3rd General Residency at Fuenlabrada University Hospital (Madrid) 2016-2019.
- Degree in Nursing from Puerto de Hierro University School of Nursing, Autonomous University of Madrid.
- 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.
- Postgraduate Certificate in Management and Quality of Care from the Nursing Leadership, FUDE.

#### Management



#### Mr. Pazos Moreno, José Manuel

- Surgical Nurse, Outpatient Surgery Unit, Elche University General Hospital
- Former supervisor of the Surgical Area and ICU. (Outpatient Surgery Unit) of the General Hospital of Elda and the General University Hospital of Elche (17 years).
- Associate Professor of Nursing at the Faculty of Sciences of the University of Alicante and Collaborating Professor of Nursing at the Faculty of Health Sciences of the Cardenal Herrera CEU University of Elche.
- Director of the online degree in Nursing in the Surgical Area and Aftercare (Aula Salud).
- Member of the Nursing and Bioethics Teaching Committee at the Elche University General Hospital.
- Organizer, speaker, communicator and panel member at various National and International Congresses on topics related to the Surgical Field.
- Director of more than 200 (two hundred) Postgraduate Courses on Surgical Instrumentation and Sutures, organized by the Nursing Department of the University of Alicante and the Official College of Nursing of Alicante, among others.



### Course Management | 15 tech

#### **Professors**

#### Dr. Andreu Gálvez, Juan

- Medical Director of the Surgical Area of the Vinalopó Hospital in Elche, from 2010-present.
- PhD in Medicine and Surgery from the University of Valencia
- Specialist in General and Digestive System Surgery, University of Murcia, 1982.
- Start-up (among others) of the H.G.U. Major Outpatient and Short Stay Surgery Unit. Elche (General Surgery)
- Professor, Organizer, speaker, communicator and panel member at various National and International Congresses on topics related to the Surgical Field.,

#### Ms. Esteban Saori, Patricia

- Preparation course for the degree in Nursing, Complutense University of Madrid 2015 -2016.
- Diploma in Nursing Autonomous University of Madrid (Jiménez Díaz Foundation) 1998-2001
- Surgical Nurse in the Lung Transplant Team at 12 de Octubre University Hospital 2005 present.
- Surgical Nurse in the Lung Transplant Team at the 12 de Octubre University Hospital 2005.

## tech 16 | Course Management

#### Mr. Garcia Del Campo, Gabriel

- Operating Room Service in the Abdominal Organ Transplant Unit at the 12 de Octubre University Hospital Madrid 2015- present
- University Diploma in Nursing San Pablo University CEU, Madrid 1997-2000.
- Official Specialist Nurse Qualification in Pediatric Nursing. Ministry of Education of Spain.
   2016.
- Virgen del Mar Hospital, Madrid. Operating Room Services and Intensive Care 2001-2003.

#### Mr. García Ortega, Eduardo

- Nurse in Surgical Department at 12 Octubre University Hospital, Madrid. (2006- present.)
- Surgical Nurse at the Moncloa de Madrid Hospital (October 2009- April 2021).
- Surgical Nurse at Nuevo Parque de Madrid Clinic (December 2005- March 2009)
- Diploma in Nursing. Complutense University of Madrid. 2005.
- Postgraduate Degree in Surgery and Anesthesia. Rey Juan Carlos University. Madrid 2006

#### Ms. Llamas Carrasco, María Jesús

- Degree in Law from the University of Alicante (1992).
- · Currently head of the Legal Services at Elche University General Hospital.
- Participant in congresses, courses and journals related to legal aspects of healthcare.
- Coordinator of courses related to legal aspects of healthcare in the Valencian School of Healthcare Studies (among others).
- Teacher in courses related to legal aspects of healthcare in the Valencian School of Healthcare Studies (among others).

#### Pazos Gonzálvez, Francisco Javier

- University Diploma in Nursing.
- Master's Degree in Nursing Care: specializing in Accidents and Emergencies.
- Surgical Nurse at Elche General University Hospital.
- Work experience in primary care and the emergency department at Elche General University Hospital.
- Currently studying a degree in Human Nutrition and Dietetics (3rd year).
- Courses studies (among others) "Surgical Instruments" and "Surgical Sutures" from the Nursing College of Alicante.
- Teaching collaborator at the Cardenal Herrera University CEU (surgical practice department).
- Collaborator in the design of distance learning courses for the "Aula Salud" company.

#### Ms. Ranz González, Raquel

- Surgical Nurse in various specialities at Gregorio Marañon Hospital and 12 de Octubre Hospital.
- Diploma and degree in Nursing from the Complutense University of Madrid
- Participation in the subcommissions of "Surgical Protocols" and "Accounting protocol revision" at 12 de Octubre University Hospital.
- Co-author of the scientific report: "A Literary Challenge" in the 6th National Congress of Surgical Nursing in Barcelona.
- Co-author of the scientific paper: Poster "Why does it hurt? Measures to preserve patient safety in the operating room" in the 3rd. National Congress of Surgical Nursing in Cordoba.

#### Dr. Santos Fuster, Pilar

- Degree in Medicine and Surgery from the University Alicante 1990
- Specialist physician in Anesthesiology and Resuscitation after a residency at Virgen de la Arrixaca Hospital in Murcia 1995.
- Professional practice as Anesthetist in the Anesthesiology and Resuscitation Department at the Elche University General Hospital.
- Master's in Bioethics from the Valencian School of Health Studies, 2003-2004.
- Master's in Administration and Management of Health Services, 2012-2013.
- Professor of various courses related to the speciality of Anesthesiology and Resuscitation.
- Participation in scientific congresses and conferences as speaker, communicator and panel member.
- Research and publications in scientific papers.
- Member of the European and World Society for Airway Management 2002 and 2004  $\,$

#### Ms. Sanz Hernándes, Natalia

- Preparation Course for the Degree in Nursing. University of Leon
- Diploma in Nursing. University of Valladolid Soria Campus.
- Surgical Nurse in Maxilofacial, Trauma and Orthopedics at 12 de Octubre University Hospital 2011 present.
- Surgical Nurse Thorax and Cardiovascular Surgery, Otorhinolaryngology, Neurosurgery at 12 de Octubre University Hospital 2007 2011.





# tech 20 | Structure and Content

#### Module 1. Preoperative Preparation of Surgical Patients

- 1.1. Importance of Communication with the Patient
- 1.2. Preoperative Psychological Considerations
- 1.3. Patient Needs
- 1.4. Possible Psychological Responses of the Patient
- 1.5. Accepting the Intervention
- 1.6. Informed consent
- 1.7. Preparation and Physical Examination of Surgical Patient Candidates
- 1.8. Patient Nutritional Needs
- 1.9. Preoperative Visits
- 1.10. Immediate Preoperative
- 1.11. Special Considerations: Diabetic, Obese, Pediatric, Geriatric and Terminal Patients

#### Module 2. Concept of Asepsis and Infection Control

- 2.1. Historical Introduction and Definitions
- 2.2. Surgical Awareness
- 2.3. Concept of Asepsis and Antisepsis
- 2.4. Preventing Surgical Infections
- 2.5. Infections and Infection Control
- 2.6. The Need for Sterile Techniques
- 2.7. Sterile Technique Principles and Examples of its Application
- 2.8. Importance of Sterilization in Biohazard Prevention



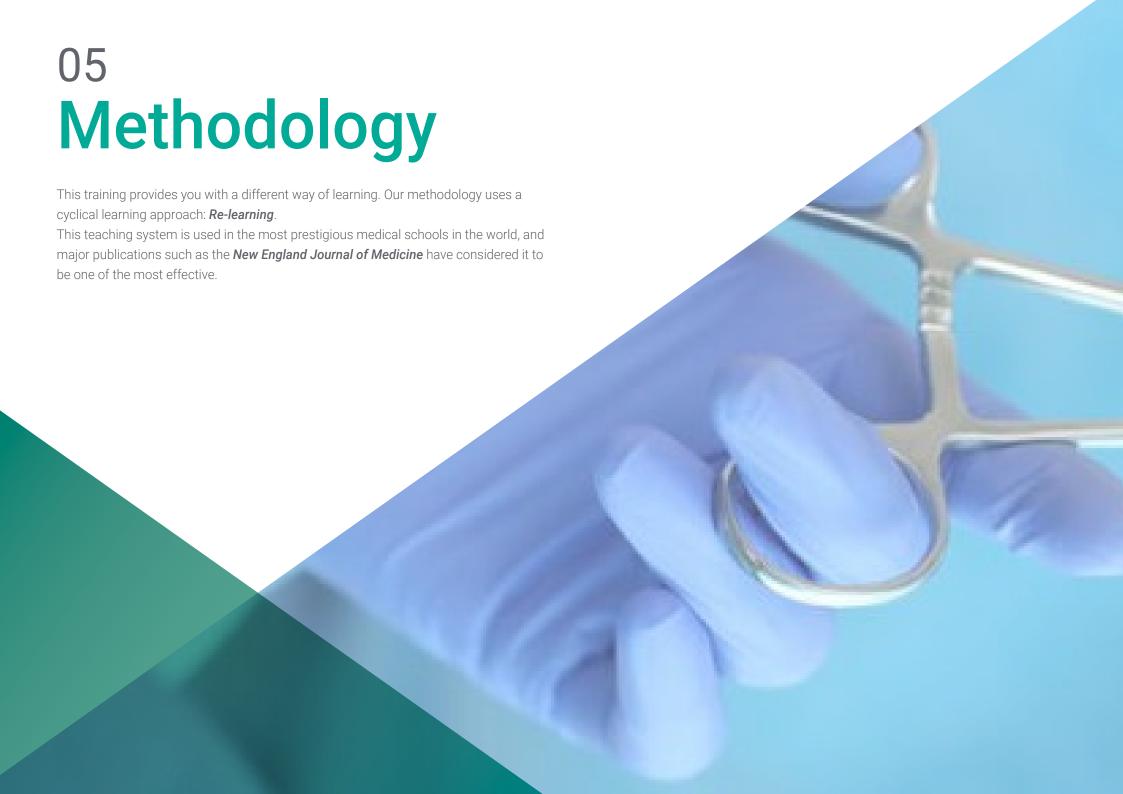
#### Module 3. Sterilisation and Disinfection

- 2.1. Central Services of Sterilization
- 3.2. The Sterilization Process
- 3.3. Methods of Sterilization
- 3.4. Instrument and Complementary Material Sterilization
- 3.5. Sterilization Controls
- 3.6. Preparing Materials for Sterilization
- 3.7. Sterile Material Conservation, Storage and Expiration
- 3.8. Factors Affecting Shelf Life
- 3.9. Biological Processes not Associated with the Sterilization Process



A unique, key, and decisive master's degree experience to boost your professional development."





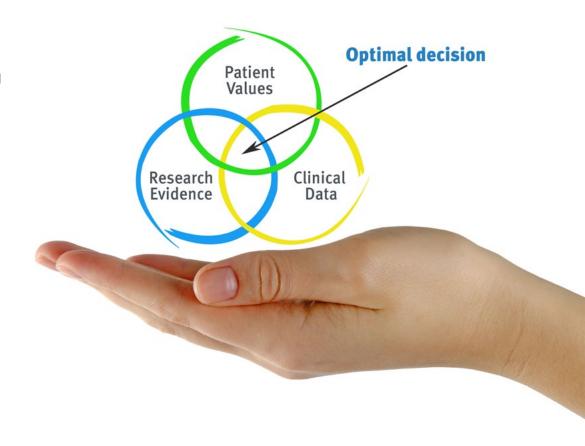


# tech 24 | Methodology

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

In a given clinical situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, 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 university program.





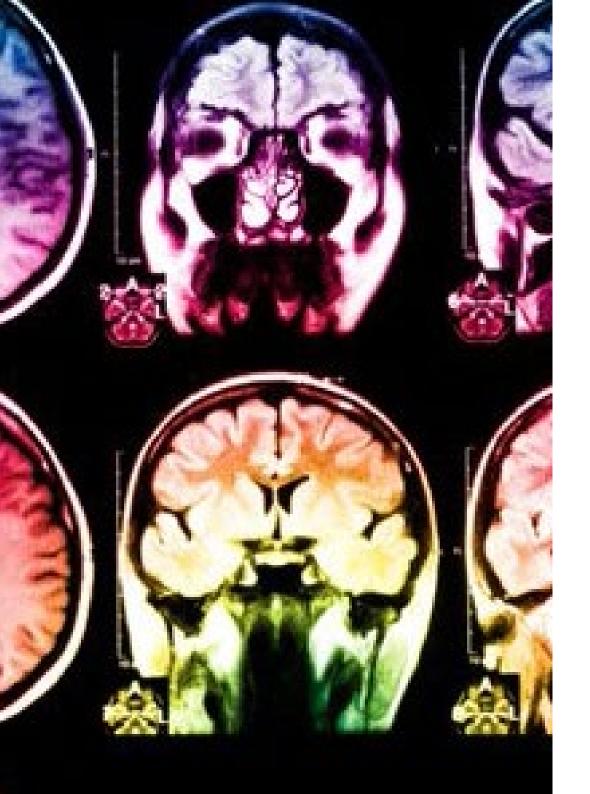
#### Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing 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 | 27 tech

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

With this methodology we have trained more than 175,000 nurses with unprecedented success, in all specialties regardless of from the workload. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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

# tech 28 | Methodology

In this program you will have access to the best educational material, prepared with you 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.

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.



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

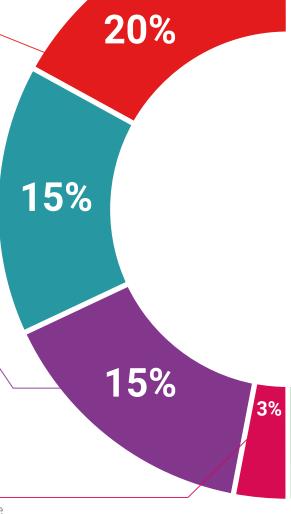
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current nursing procedures and techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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 unique multimedia content presentation training system 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 training.

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

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through 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 your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.

#### Classes



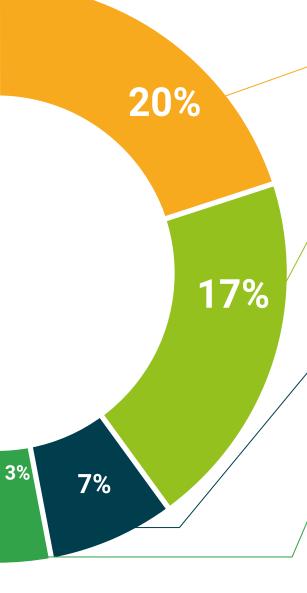
There is scientific evidence suggesting that observing third-party experts can be useful.

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

#### **Quick Action Guides**



We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







# tech 30 | Certificate

This Postgraduate Certificate in Preoperative Preparation and Infection Control is the most complete and up-to-date scientific program on the market.

After the student has passed the evaluations, they will receive their corresponding certificate issued by TECH - Technological University by tracked mail.

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

Title: Postgraduate Certificate in Preoperative Preparation and Infection Control

ECTS: 4

Number of Hours: 100 hours



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper diploma Apostilled, TECH EDUCATION will make the necessary arrangements to obtain it at an additional cost of €140 plus shipping costs of the Apostilled diploma.

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