Advanced Master's Degree

Operating Room Nursing

Accreditation/Membership

National League for Nursing

tech global university

tech global university

Advanced Master's Degree
Operating Room Nursing

- Modality: **online**
- Duration: **2 years**
- Certificate: **TECH Global University**
- Credits: **120 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/nursing/advanced-master-degree/advanced-master-degree-operating-room-nursing

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01

Introduction to the Program

Operating Room Nursing represents one of the most complex and specialized areas within the nursing profession. According to data from the International Council of Nurses (ICN), more than 30% of intraoperative errors can be linked to deficiencies in the specific training of perioperative nursing staff, highlighting the need for advanced and up-to-date academic programs. To address this demand, TECH has designed this high-level postgraduate program aimed at consolidating clinical, technological, and organizational competencies. Through a 100% online methodology, enrolled professionals will acquire the necessary tools to enhance their impact on clinical practice and contribute to excellence in care within the surgical environment.

A comprehensive and 100% online program, exclusive to TECH, with an international perspective backed by our membership in the National League for Nursing"

Operating Room Nursing is an essential specialty within healthcare, responsible for providing specialized care to patients before, during, and after surgical procedures. In this environment, professionals must have advanced preparation and technical skills to ensure not only patient safety but also a quick and effective response to high-complexity situations. Given the constant advancements in surgical techniques and medical technology, it is essential for nurses to stay updated with the latest developments in this field.

To meet this demand, TECH has developed this Advanced Master's Degree in Operating Room Nursing, which will provide the necessary tools to lead and manage surgical procedures with excellence. Through a comprehensive academic approach, the program will cover everything from preoperative preparation and operating room management to postoperative monitoring, as well as managing high-tech equipment and risk management. Additionally, professionals will learn to apply advanced surgical protocols, sterilization techniques, and emergency management, all with a focus on patient safety and well-being.

Moreover, the university program will be delivered 100% online, offering flexibility and accessibility for those who wish to balance their work with their studies. Thanks to the Relearning methodology, graduates will be able to continuously review and reinforce key concepts, ensuring deep and lasting comprehension. In conclusion, TECH will allow you to advance in your professional development in a comfortable and effective manner, with content accessible at any time and from any device, regardless of your location.

As a member of the **National League for Nursing (NLN)**, TECH offers students access to assessment tools, digital libraries, webinars, and conferences focused on nursing educational excellence. This membership promotes faculty development, engagement with leading experts in the field, and the opportunity to join high-impact academic and clinical networks.

This **Advanced Master's Degree in Operating Room Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Operating Room Nursing
- 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
- Practical exercises where self-assessment can be used to improve learning
- Special emphasis on innovative methodologies in Operating Room Nursing
- 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

With this Advanced Master's Degree, you will prepare to be part of the forefront in the Surgical field, combining science and technology. What are you waiting for to enroll?"

You will continually improve your professional practice with the most advanced scientific and technical knowledge in Surgical Nursing"

This Advanced Master's Degree will not only prepare you for the operating room but will also open doors to new opportunities for professional and personal growth.

You will acquire the necessary tools to face the challenges of the operating room and enhance the patient experience, all in a 100% online format.

It includes a faculty composed of professionals from the Operating Room Nursing field, who bring their work experience to this program, alongside 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 an immersive learning experience designed to prepare for real-life situations.

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

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Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.

Study at the largest online university in the world and ensure your professional success. The future begins at TECH"

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 Wistuba, 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 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.

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 top-rated 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.

03

Syllabus

The syllabus will provide the most advanced knowledge in Operating Room Nursing. As they progress through the training, professionals will delve into specialized surgical techniques, the management of cutting-edge technologies (robot-assisted surgery), surgical safety protocols, and comprehensive patient care. Additionally, they will address topics such as emergency management and resource management in the operating room, providing tools to optimize performance in high-pressure situations. In this way, graduates will develop skills in multidisciplinary collaboration, leadership in the operating room, and the ability to adapt to various situations.

With TECH, you will be ready to face any challenge in a high-pressure and high-tech surgical environment"

Module 1. Operating Room Nurses

1.1. Professional Secrecy
1.2. Brief Historical Introduction to Surgical Nursing and "Modern" Surgery
1.3. Professional Nursing. Qualities and Personal Traits for Nurses Choosing to Serve in the Surgical Area
1.4. Stress Control in the Operating Room. Burnout Syndrome or "Burned-Out" Worker
1.5. Nursing Practice and the Humanization of Care in the Operating Room

Module 2. Architecture, Facilities, and Equipment in the Operating Room Area

2.1. Architecture and Facilities: Structure and Location, Space Design and Distribution
2.2. Characteristics and Surgical Equipment
2.3. New Topic: Operating Room Design
2.4. Biosecurity in Operating Rooms
2.5. Analysis of the Situation in the Surgical Block
2.6. Patient Safety in the Surgical Block
2.7. Specific Equipment for Certain Interventions: Electrosurgery. Electric Scalpel
2.8. Specific Equipment for Certain Interventions: Pneumatic Tourniquet (Ischemia) and Endoscopic Surgery
2.9. Specific Equipment for Certain Interventions: Laser Technology

Module 3. Concept of Asepsis. Infection Control. Sterilization and Disinfection

3.1. Brief Historical Introduction and Some Definitions
3.2. Infection and Its Control
3.3. The Needs of a Sterile Technique
3.4. Central Sterilization Services
3.5. Sterilization Methods
3.6. Sterilization Controls
3.7. Preparation of Materials for Sterilization
3.8. Maintaining Stocks of Sterile Materials
3.9. Biological Risks Not Associated with the Sterilization Process
3.10. Reuse of Single-Use Medical Devices
3.11. Occupational Risks in Sterilization Units
3.12. Cleaning an Operating Room

Module 4. Preoperative Preparation of the Surgical Patient

4.1. Communication with the Patient and Psychological Considerations Prior to Surgery
4.2. Patient Needs, Psychological Responses, Acceptance of the Intervention, and Informed Consent
4.3. Preparation and Physical Evaluation of the Patient Candidate for Surgery. Nutritional Needs
4.4. Special Considerations: Diabetic, Obese, Pediatric, Geriatric, and Terminal Patients
4.5. Preoperative Assessment in Pediatric Surgery
4.6. Interpersonal Relationships Between Nursing-Patient and Nursing-Surgical Team
4.7. Preoperative Shaving
4.8. Surgical Preparation for People with Cognitive Disabilities
4.9. Preoperative Skin Preparation
4.10. Latex Allergic Patient

Module 5. Organization and Interrelationship of Nursing Work in the Surgical Area

5.1. Needs of the Operating Room
5.2. Economic Use of Materials and Equipment
5.3. Role of the Surgical Nurse. Roles during Different Phases of the Surgical Intervention (Preoperative, Intraoperative, and Postoperative Periods)
5.4. Other Members of the Surgical Team. The Importance of Teamwork
5.5. Surgical Scrubbing and Sterile Gown and Glove Placement
5.6. Preparation of Instrument Tables
5.7. Transfer of the Patient to the Operating Table. The Transfer to the Operating Table
5.8. The Operating Table: Generalities, Patient Positions According to the Surgical Technique to Be Performed
5.9. Possible Patient Injuries Due to Incorrect Placement and/or Positioning on the Operating Table
5.10. Intraoperative Techniques. Economy in "Time and Motion"
5.11. Radiation Risks and Precautions
5.12. Completion of the Procedure. Removal of the Surgical Field, Collection, and Cleaning of the Operating Room

Module 6. Types of Surgery

6.1. Gynecological Surgery
6.2. Urological Surgery
6.3. Cardiac Surgery
6.4. Vascular Surgery
6.5. Ophthalmological Surgery
6.6. Otolaryngological Surgery
6.7. Orthopedic Surgery
6.8. General Surgery
6.9. Neurosurgery
6.10. Thoracic Surgery
6.11. Dermatological Surgery

Module 7. Surgical Instrumentation

7.1. General Aspects. Surgical Times. Surgical Instruments: Characteristics, Parts, Classification, and Indications
7.2. Arrangement of Surgical Instruments and Other Materials on the Instrumentation Table(s). Care and Handling of Various Surgical Instruments
7.3. Presenting Basic and General Surgical Instruments
Instrumentation Techniques
7.4. Textile, Disposable and Prosthetic Materials. Surgical Specialties. Instrument Cleaning and Preparation prior to Sterilization Referral
7.5. "Silent" Instrumentation. Role of Nurses in New Technologies
7.6. Surgical Field Set-Up and Sterile Field Preservation in Laparoscopy
7.7. Basic Instruments in Laparoscopy
7.8. Nursing Staff Intervention in Laparoscopic Surgery
7.9. Safety Activities in Surgical Instrumentation
7.10. Robots. New Colleagues in the Operating Room. Da Vinci System

Module 8. Surgical Sutures

8.1. History and Definition of Suture
8.2. Classification and Characteristics of Suture Thread
8.3. Surgical Needles
8.4. Anatomy of a Surgical Needle - Practical Aspects of Use
8.5. Suture Techniques, Indications and Removal
8.6. Hemorrhages and Healing Phases
8.7. Types of Surgical Suture
8.8. Suture Anesthesia
8.9. Surgical Suture Care at Home

Module 9. Anesthesia I

9.1. What is Anesthesia? Evolution of Current Concepts of Anesthesia
9.2. Patient Safety in Anesthesia
9.3. Pre-Anesthetic Consultation
9.4. Apparatus to Support Anesthetic Control
9.5. Surgical Patient Monitoring I. Cardiovascular
9.6. Surgical Patient Monitoring II. Respiratory, Renal Function and Acid Base Balance
9.7. Surgical Patient Monitoring III. Temperature, Neuromuscular and CNS
9.8. Nursing Airway Management
9.9. Devices to Ensure Airway Permeability. Airway Cart
9.10. Fluid Therapy, Blood and Blood Products
9.11. Anesthesia in Pediatrics

Module 10. Anesthesia II

10.1. General Anesthesia
10.2. Most Common Anesthetic Agents (Drugs)
10.3. Inhalation Anesthetic Agents
10.4. Regional Anesthetic and Analgesic Techniques
10.5. Peripheral Blockages. Sedation
10.6. Nursing Care for Patients under Anesthesia. Crash Cart
10.7. Postoperative Complications
10.8. Interventions that Can Prevent Preoperative Complications
10.9. Patient Admission to the Post-Anesthesia Recovery Unit
10.10. Possible Complications Discharge Criteria

Module 11. Research Methodology in Operating Room Nursing

11.1. Retrieval of High-Quality Specialized Information in Health Sciences
- 11.1.1. Development of a Bibliographic Search
- 11.1.2. Understanding the Various Sources of Information: General Search Engines (Google Scholar, Scopus), Databases (PubMed, Embase, CINAHL), and Clinical Practice Guidelines Clearinghouses
- 11.1.3. Design of Complex Search Strategies
- 11.1.4. Refinement of Search Results
- 11.1.5. Creation of Bibliographic Alerts

11.2. Reference Management Software
- 11.2.1. Introduction to Reference Management Tools
- 11.2.2. Importing References into the Zotero Reference Manager
- 11.2.3. Extracting Metadata from PDFs
- 11.2.4. Using Tags or Metadata for Bibliographic Classification
- 11.2.5. Incorporating References into the Text. Vancouver Style
- 11.2.6. Social Web and Collaborative Work

11.3. Critical Reading in Outcomes Research
- 11.3.1. Introduction. Critical Reading
- 11.3.2. Some Basic Concepts in Epidemiology
- 11.3.3. Qualitative Research Designs
- 11.3.4. Quantitative Research Designs
- 11.3.5. Tools for Critical Appraisal

11.4. How to Develop a Research Protocol
- 11.4.1. Sections Comprising a Research Project Protocol
- 11.4.2. Writing Articles with a Scientific Structure
- 11.4.3. Writing Case Reports, Reviews, Articles on Qualitative Research, and Theses or Dissertations
- 11.4.4. Style in Scientific Communication

11.5. Master's Final Project: Academic Work Based on Bibliographic Review and Research
- 11.5.1. The Importance of the Master's Final Project
- 11.5.2. Proposal and Feasibility of the Master's Final Project
- 11.5.3. Recommendations for Developing the Master's Final Project
- 11.5.4. Development and Evaluation of the Master's Final Project
- 11.5.5. Presentation and Defense of the Master's Final Project

Module 12. Perioperative Surgical Process

12.1. Definition of the Perioperative Surgical Process
12.2. Preoperative Surgical Process
12.3. Intraoperative Surgical Process
12.4. Postoperative Surgical Process

Module 13. Plastic Surgery

13.1. Breast Surgeries
13.2. Liposuction and Fat Grafting / Lipofilling
13.3. Free Flaps for Tissue Loss in the Lower Limbs
13.4. Burns
13.5. Plasties
13.6. Reimplantation and Limb Transplantation
13.7. Gender Dysphoria

Module 14. Orthopedic and Trauma Surgery

14.1. Specific Considerations in Orthopedic and Trauma Surgery
14.2. Primary Upper Limb Prostheses and Surgical Cementation
14.3. Primary Lower Limb Prostheses
14.4. Revision of Primary Prostheses, Surgical Lavage, and Spacers
14.5. Osteosynthesis I: Bone Healing, Reduction, and Stability
14.6. Osteosynthesis II: Fracture Fixation
14.7. Peri-implant Osteosynthesis, External Fixation (EMO), and O-ARM® Technology
14.8. Osteosynthesis in the Axial Skeleton
14.9. Exploratory Arthroscopy and Tendon Structure Repair
14.10. Tumor and Experimental Surgery

Module 15. Neurosurgery

15.1. Specific Considerations in Neurosurgery
15.2. Anatomophysiology and Pathologies Treated
15.3. Cranial Procedures
15.4. Spinal Procedures
15.5. Peripheral Nerves
15.6. Functional Neurosurgery

Module 16. Cardiac Surgery

16.1. Specific Considerations in Cardiac Surgery
16.2. Anatomophysiology
16.3. Valve Surgeries
16.4. Coronary Surgeries. Aorto-Coronary and/or Mammary-Coronary Bypass
16.5. Surgical Repair of Cardiac Rhythm Disorders
16.6. Surgical Procedures in Adults with Congenital Heart Disease
16.7. Other Surgical Procedures
16.8. Emergency Interventions
16.9. Management of Intra-Aortic Balloon Pump, Ventricular Assist Devices, and ECMO in Cardiogenic Shock
16.10. Extracorporeal Circulation Machine

Module 17. General Surgery

17.1. Open Surgeries (Laparotomy)
17.2. Minimally Invasive Surgeries (Laparoscopy)
17.3. Proctologic Surgery
17.4. Breast Surgery
17.5. Endocrine Surgery
17.6. HIPEC: Extensive Cytoreductive Surgery for Peritoneal Carcinomatosis with Hyperthermic Intraperitoneal Chemotherapy

Module 18. Ophthalmology

18.1. Specific Considerations in Ophthalmology
18.2. Cataract Surgery
18.3. Retinal Pathologies
18.4. Corneal Pathologies
18.5. Oculoplastic Procedures
18.6. Trabeculectomy for Glaucoma

Module 19. Gynecologic and Obstetric Surgery

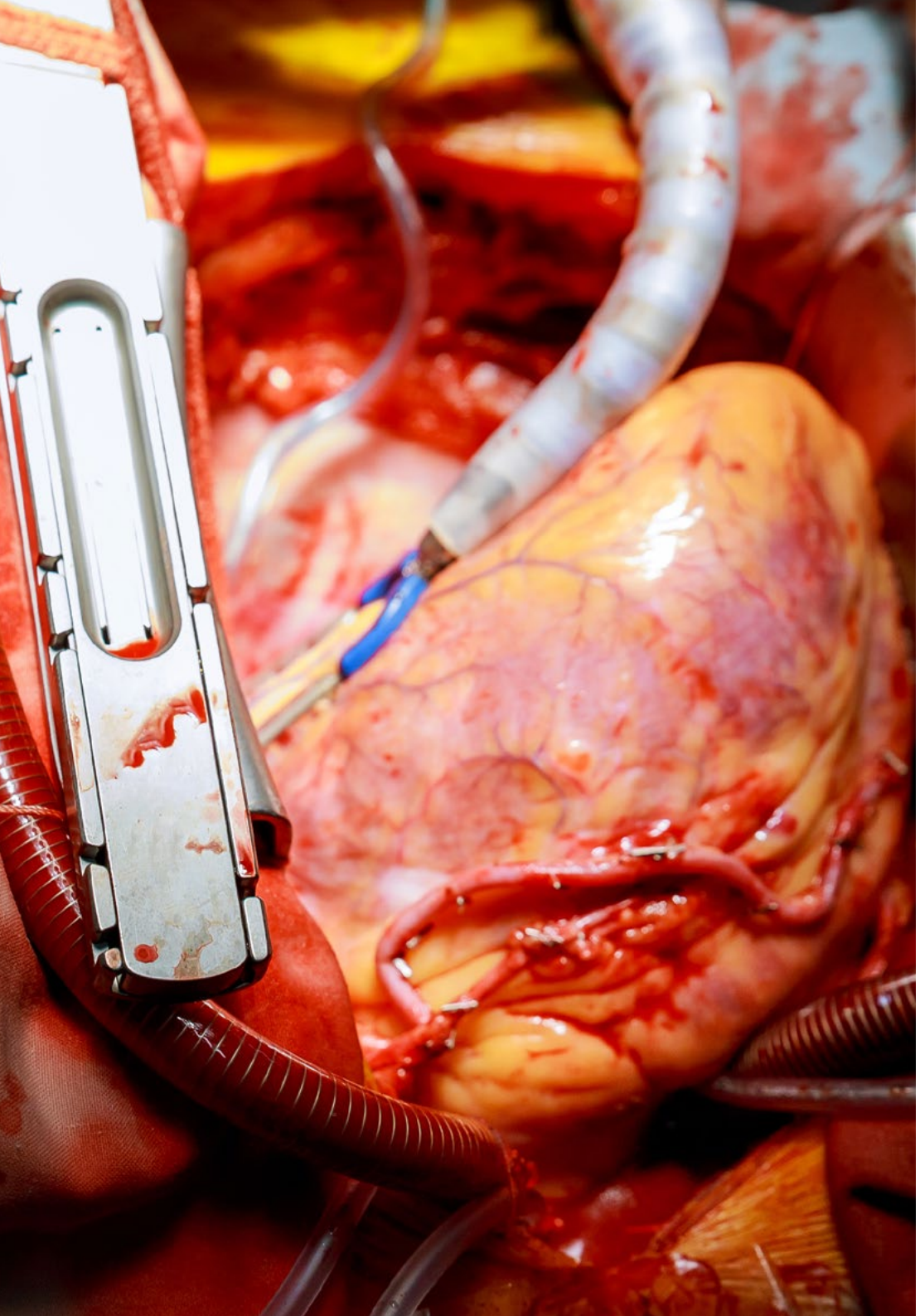
19.1. Gynecologic Procedures Performed via Laparoscopy
19.2. Procedures Performed via Laparotomy
19.3. Procedures Performed via Vaginal Approach
19.4. Breast Procedures
19.5. Pregnant Woman
19.6. Fetal Surgery

Module 20. Vascular Surgery

20.1. Carotid Endarterectomy
20.2. Bypass (Using Prosthesis, Vein, or In Situ Technique)
20.3. Thrombectomy/Embolectomy for Upper or Lower Limb Ischemia
20.4. Arteriovenous Fistula
20.5. Venous Insufficiency – Varicose Veins
20.6. Amputations and Repair of Vascular Anomalies
20.7. Arterial Angioplasties (With or Without Vascular Stent Placement)
20.8. Endovascular Prosthesis (Thoracic Aorta / Abdominal Aorta)

Module 21. Urology

21.1. Overview of Urology and Laparoscopic Procedures
21.2. Transurethral Procedures
21.3. Open Procedures (Laparotomy)
21.4. Percutaneous and Other Procedures
21.5. Additional Procedures



Module 22. Maxillofacial Surgery

22.1. Mandible
22.2. Reduction and Osteosynthesis of Maxillofacial Fractures
22.3. Facial Procedures
22.4. Oral Procedures
22.5. Surgical Management of Maxillofacial Abscesses
22.6. Tracheostomy

Module 23. Otorhinolaryngology

23.1. Otorhinolaryngologic Surgery
23.2. Tracheal Surgery
23.3. Laryngeal Surgery
23.4. Pharyngeal Surgery
23.5. Nasal Surgery
23.6. Ear Surgery

Module 24. Thoracic Surgery

24.1. Specific Considerations in Thoracic Surgery
24.2. Anatomophysiology of the Respiratory System
24.3. Tracheal Surgeries
24.4. Pulmonary Surgeries
24.5. Other Surgical Procedures

04

Teaching Objectives

Through a comprehensive approach, this university program empowers professionals to develop advanced competencies in the most complex areas of surgery—from the use of cutting-edge technologies to the management of human and material resources in the operating room. Participants will be equipped to apply surgical safety protocols, optimize patient care, and coordinate effectively with the multidisciplinary surgical team. Additionally, graduates will strengthen their leadership skills, enabling them not only to become highly skilled technicians, but also influential leaders who contribute positively to surgical processes and the overall quality of care.

You will enhance your holistic understanding of surgical nursing, positioning yourself to join the most advanced and patient-centered surgical teams"

General Objectives

- Develop skills to assist in surgical interventions and invasive procedures
- Apply principles of asepsis and antisepsis to maintain a safe surgical environment
- Manage surgical instruments and materials to ensure their proper use
- Develop competencies in postoperative patient care to ensure optimal recovery
- Apply monitoring techniques in the operating room to track vital signs during surgery
- Cultivate the ability to identify and manage potential intraoperative complications
- Employ effective communication strategies with the surgical team to enhance coordination and safety
- Develop skills in the administration and handling of medications and anesthetics in the operating room
- Manage surgical documentation and procedure records in accordance with legal standards
- Apply preoperative care techniques to prepare patients for surgery
- Acquire proficiency in cleaning and sterilization procedures in the operating room
- Apply ergonomic principles to ensure the safety and comfort of the surgical team
- Develop competencies in operating advanced technologies used in the surgical setting
- Apply infection control protocols to prevent postoperative complications
- Gain expertise in caring for patients in surgical emergency situations
- Organize and arrange surgical instruments to facilitate procedures
- Develop competencies in educating and guiding patients and their families on postoperative care
- Apply principles of safety and ethics in the surgical care of patients
- Provide emotional support to patients before, during, and after surgery
- Apply quality control practices in surgical care to improve health outcomes
- Strengthen teamwork competencies within the multidisciplinary surgical environment
- Apply emergency management protocols in critical intraoperative situations
- Develop skills in evaluating and preparing patients for complex surgical procedures
- Apply principles of bioethics and confidentiality in the handling of surgical and patient information
- Develop competencies in integrating new surgical technologies into daily clinical practice

Specific Objectives

Module 1. Operating Room Nurses

- Identify opportunities to apply theoretical knowledge to practical tasks and techniques performed in the operating room
- Recognize the value of teamwork in achieving defined goals
- Prevent errors or accidents that may compromise the primary objective of Nursing: patient protection in the surgical area
- Establish a relationship with the patient and their family that goes beyond technical care, addressing all aspects of their condition as whole individuals

Module 2. Architecture, Facilities, and Equipment in the Operating Room Area

- Describe the most common surgical situations in hospital settings and the role of the operating room nurse in those contexts
- Gain in-depth knowledge of the characteristics of operating rooms
- Understand and analyze the spatial layout of the surgical area
- Review various types of surgical equipment

Module 3. Concept of Asepsis and Infection Control. Sterilization and Disinfection

- Review the key principles of surgical asepsis
- Analyze the concept of infection
- Master techniques for infection control
- Understand the need for sterile techniques

Module 4. Preoperative Preparation of the Surgical Patient

- Analyze the foundations of communication with the surgical patient
- Understand how to address the patient's needs, including psychological, adaptive, and informed consent aspects
- Learn how to assess the physical and nutritional status of the preoperative patient
- Be capable of performing a preoperative assessment of pediatric patients

Module 5. Organization and Interrelationship of Nursing Work in the Surgical Area

- Apply the scientific method to develop surgical procedures and routines, incorporating updated knowledge and practices in line with new care trends
- Implement strategies to meet emerging healthcare demands
- Analyze and apply new care models based on psychosocial determinants of health, encouraging a multidisciplinary approach and promoting patient participation in their care
- Master the preparation of the surgical field

Module 6. Types of Surgery

- Explore preoperative and intraoperative protocols for different types of surgery
- Stay up to date with the various types of surgery according to the targeted anatomical area

Module 7. Surgical Instrumentation

- Recognize and classify general and specialty surgical instruments according to their function
- Analyze the use of textiles, consumables, and prosthetic materials in surgical procedures
- Master the cleaning process for instruments prior to sterilization
- Apply new technologies to surgical instrumentation

Module 8. Surgical Sutures

- Master the classification and characteristics of suture materials
- Analyze the use and mechanics of surgical needles
- Explore suturing techniques and indications for tissue approximation
- Learn to remove sutures, including equipment, materials, procedures, and key considerations

Module 9. Anesthesia I

- Update procedures for drug management and patient monitoring during anesthesia
- Deepen understanding of patient safety during anesthesia
- Master intraoperative monitoring to detect anomalies
- Master airway management: intubation and extubation

Module 10. Anesthesia II

- Explore the fundamentals of general anesthesia
- Identify commonly used drugs for different cases
- Deepen knowledge of regional anesthesia techniques
- Understand nursing care for anesthetized patients and management of the crash cart

Module 11. Research Methodology in Operating Room Nursing

- Conduct critical reading of outcomes research
- Retrieve scientific information related to surgical nursing
- Master the writing of scientifically structured articles and publication in peer-reviewed journals
- Explore the use of the AGREE instrument

Module 12. Perioperative Surgical Process

- Explain and define the perioperative surgical process and its three main phases
- Define the competencies and skills required of surgical nurses, identifying key personal and professional attributes
- Identify the different areas involved in the surgical process and their interaction with support services
- Understand the importance of reciprocal communication between patient/family and nursing staff throughout the surgical process

Module 13. Plastic Surgery

- Master microsurgical techniques in free flap procedures and reimplantations
- Understand breast reconstruction with implants, and explain proper handling of different implant types
- Explain breast reduction techniques, managing the excised tissue weight
- Apply osteosynthesis knowledge in limb reimplantation procedures

Module 14. Orthopedic and Trauma Surgery

- Explain proper handling and placement of general and specialty surgical equipment; describe arthroscopy techniques
- Differentiate between cemented and uncemented arthroplasties, identifying prosthesis components and corresponding surgical techniques
- Integrate osteosynthesis knowledge into fracture repair and deformity correction
- Apply strategies to reduce bleeding and prevent periprosthetic fractures in revision arthroplasty

Module 15. Neurosurgery

- Identify hospitals with neurosurgery services
- List collaborative units working with the neurosurgery department
- Explain standard protocols in each department
- Prepare necessary materials for neurosurgical procedures
- Summarize neurological anatomophysiology
- Justify the intraoperative use of specific medications in neurosurgery

Module 16. Cardiac Surgery

- Acquire skills for handling cardiac valve implants (mechanical, biological, or annuloplasty rings)
- Explain the nursing role in microsurgical procedures for aorto-coronary bypass and management of autologous grafts
- Distinguish between types of implants used in aortic surgery and describe required postoperative care
- Master emergency interventions where patient survival is critically compromised, acting with composure and ensuring all necessary equipment is ready in advance

Module 17. General Surgery

- List the collaborating units within the thoracic surgery service
- Explain standard protocols in each department
- Prepare necessary materials for neurosurgical procedures
- Summarize the anatomophysiology of the respiratory system
- Justify the use of specific medications in thoracic surgery
- Identify pathologies treatable in thoracic operating rooms

Module 18. Ophthalmology

- Differentiate types of ophthalmic anesthesia: intracameral, topical, and retrobulbar, based on surgical indication
- Update techniques for managing phacoemulsification and vitrectomy devices, and preparation of consumables and irrigation solutions for cataract and vitrectomy surgeries
- Identify types of intraocular lenses and their indications based on patient pathology
- Determine use and preparation of binocular magnifiers, Honan balloons, manometers, intraocular gases, and surgical equipment such as lasers, diathermy, cryogenic generators, and surgical motors

Module 19. Gynecologic and Obstetric Surgery

- Acquire the necessary knowledge to assist in laparoscopic gynecologic surgeries and understand the specifics of procedures performed with this technique
- Update protocols for handling and processing surgical specimens for histopathological analysis
- Recognize the importance of swift action in ectopic pregnancies and life-threatening emergencies
- Control instruments and materials in contact with tumors to prevent dissemination during laparotomy procedures

Module 20. Vascular Surgery

- Describe the use of mechanical suture systems for anastomosis
- Identify instruments and materials for organizing laparoscopic or open surgeries
- Respond appropriately to changes in surgical plans (e.g., conversion from laparoscopy to open surgery) due to complications
- Explain the function of various vessel-sealing and cutting clamps used in open and laparoscopic procedures

Module 21. Urology

- Prepare and assist in all transurethral surgeries—diagnostic, therapeutic, or involving catheter placement/removal
- Describe laparoscopic urologic surgeries and understand the specifics of procedures performed via this technique
- Anticipate and manage potential complications during nephrectomy (e.g., damage to digestive organs or major blood vessels)
- Learn to collaborate with the team during kidney transplantation procedures

Module 22. Maxillofacial Surgery

- Explain the correct handling and placement of devices and instruments in temporomandibular joint arthroscopy
- Update microsurgical procedures for maxillofacial reconstruction with free flaps

Module 23. Otorhinolaryngology

- Process intraoperative samples, frequently required in head and neck surgeries
- Assist in laryngectomy and tracheostomy procedures, which involve complex anatomical structures
- Identify and prepare different types of tracheostomy cannulas
- Participate in surgeries involving the vocal cords and provide psychological support to patients during recovery, especially when speech is affected

Module 24. Thoracic Surgery

- List the collaborating units within the thoracic surgery service
- Explain standard protocols in each department
- Prepare necessary materials for neurosurgical procedures
- Justify the use of specific medications in thoracic surgery

You will become a benchmark of surgical precision and safety! Take the next step in your career with this comprehensive academic program"

05

Career Opportunities

Graduates of the Advanced Master's Degree program will benefit from vast and highly promising career opportunities, gaining access to positions in the most prestigious hospitals and clinics worldwide. This university program prepares nurses to take on key roles within multidisciplinary surgical teams, working as specialized operating room nurses. In addition, they will be qualified to pursue leadership roles in the management of hospitals and healthcare centers, overseeing projects aimed at optimizing resources and enhancing the patient experience in the surgical environment. Armed with this profile, graduates will be prepared to join the elite of surgical nursing—leading innovations and ensuring the highest standards of patient care.

This university qualification allows you to transform your passion for patient care into a dynamic and rewarding professional career in the operating room"

Graduate Profile

Graduates will possess a highly specialized professional profile, equipped with advanced skills in operating room management, the use of cutting-edge technologies, and the implementation of surgical safety protocols to ensure maximum efficiency. They will be capable of leading surgical teams, effectively coordinating multidisciplinary professionals, managing resources, and optimizing processes to improve the patient experience. With an innovative vision, these experts will be fully prepared to face the most complex challenges in the surgical field, demonstrating a strong capacity for adaptation and sound decision-making under pressure.

At TECH, you will master the most advanced surgical techniques and enhance postoperative outcomes through the knowledge acquired.

- **Advanced Surgical Management Skills:** Efficiently manage the operating room, coordinating workflow, resources, and multidisciplinary teams to ensure maximum efficacy in every surgical procedure
- **Proficiency in Surgical Technologies:** Operate the latest surgical technologies and techniques with precision, improving patient outcomes through advanced technical expertise
- **Decision-Making Under Pressure:** Make fast, effective decisions in high-pressure situations, ensuring patient safety and the successful completion of surgical procedures
- **Leadership and Teamwork:** Lead surgical teams while fostering collaboration and ensuring effective communication among all team members to optimize performance during interventions

After completing the university program, you will be able to apply your knowledge and skills in the following positions:

1. **Specialized Operating Room Nurse:** Responsible for assisting and coordinating all activities within the operating room, ensuring proper patient care during surgery and maintaining the highest standards of safety
2. **Operating Room Coordinator:** Oversees the management of the operating room, including team coordination, resource allocation, and process optimization to ensure the efficient flow of surgical procedures
3. **Chief of Surgical Nursing:** Leader of the nursing team in the surgical area, responsible for supervising, training, and ensuring that nurses comply with safety protocols and provide high-quality care during surgeries
4. **Surgical Safety Manager:** In charge of implementing and monitoring surgical safety protocols, ensuring that the highest standards are met in every procedure to minimize risks and complications
5. **Leader in Surgical Resource Management:** Responsible for optimizing the use of material, technical, and human resources in the operating room, ensuring that everything required for surgery is available and in optimal condition
6. **Surgical Nursing Consultant:** Advisor on the improvement of surgical processes, the implementation of new technologies, and the optimization of nursing protocols in surgical settings
7. **Surgical Nursing Researcher:** Conducts research in the field of surgical nursing, exploring new practices, technologies, and procedures that enhance patient safety and the quality of surgical care
8. **Director of Perioperative Nursing:** Oversees the entire surgical care process, supervising nursing teams before, during, and after surgery to ensure continuity of care and service excellence
9. **Consultant in Multidisciplinary Team Management:** Coordinates multidisciplinary teams in the operating room, promoting effective collaboration and ensuring that surgical objectives are achieved efficiently and safely

06

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.

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.

"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.

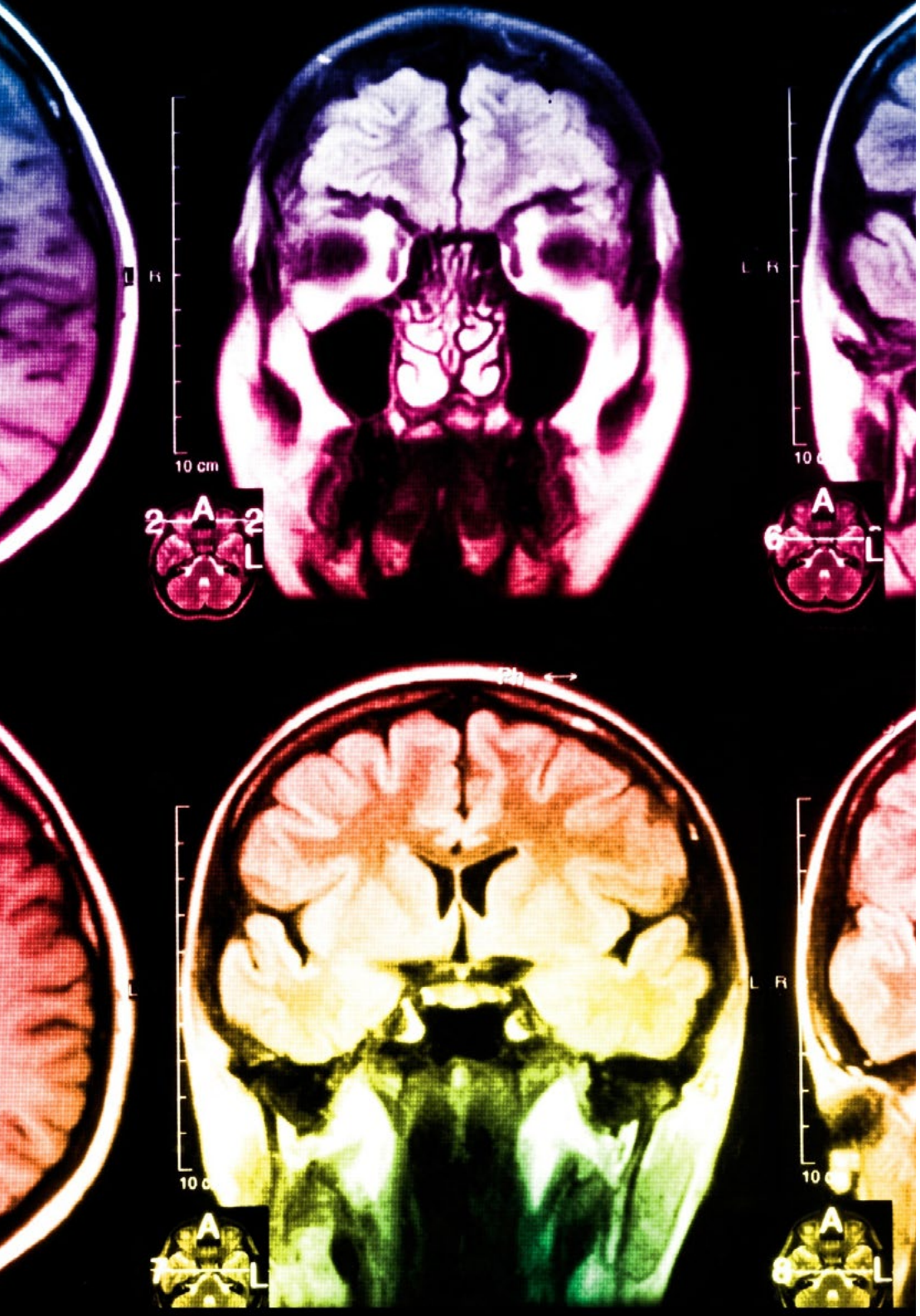
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

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.

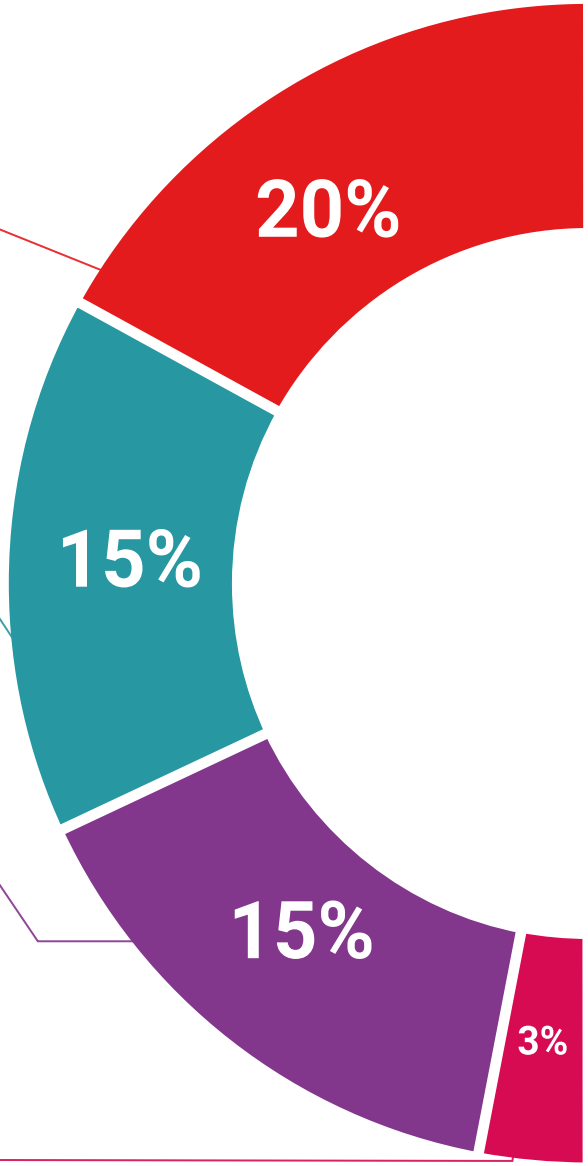
Interactive Summaries

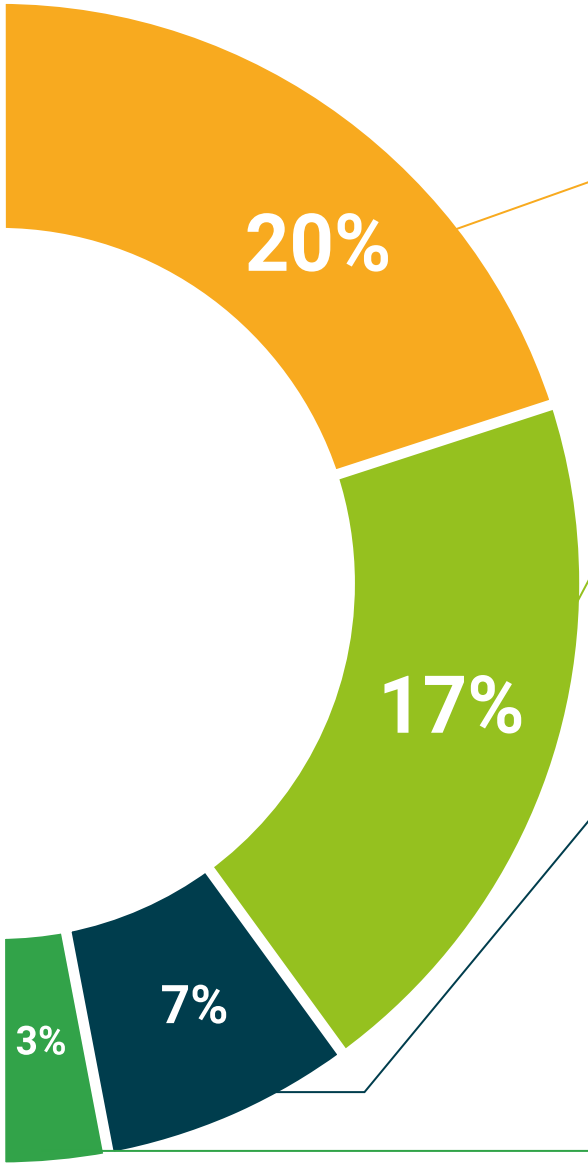
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.





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.

07

Teaching Staff

The teaching staff of this Advanced Master's Degree is one of its fundamental values. Handpicked from among the best in the industry, they form a group of renowned experts who know not only the theoretical aspects of this type of work, but also each and every one of its aspects and the different situations in which professionals may find themselves. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner. Ultimately, graduates will benefit from a world-class faculty that will serve as a key ally in advancing their professional careers.

With a globally recognized specialization in Surgical Nursing, you will become a professional fully equipped to face the most demanding challenges of the operating room"

Management

Ms. Guzmán Almagro, María Isabel

- Nurse Specialist in Comprehensive Nursing Care in Critical and Emergency Situations in Adults
- Surgical Block Nurse at La Paz University Hospital
- Master's Degree in Social Gerontology: Longevity, Health and Quality, University of Jaén
- University Expert in Accidents and Emergencies from the Complutense University of Madrid
- University Expert in Digital Teaching in Nursing by CEU Cardenal Herrera University
- Diploma in Nursing from the University of Jaén
- Coordinator of several nursing programs in Spain
- Invited to the XII National Congress of Surgical Nursing, La Paz University Hospital

Ms. Bárzano Saiz, María Estela

- Operating Room Nurse at La Paz Hospital, Madrid
- Staff Nurse in Medical-Surgical Specialties and Palliative Care, Gregorio Marañón University Hospital, Madrid
- Intensive Care Unit, Gregorio Marañón University Hospital
- Nurse of consultation and clinical analysis, Gran Via Medical Center, Madrid
- Physiotherapist, FREMAP. General Ricardos Health Care Center. Madrid
- Physiotherapist, personalized physiotherapy treatments in consultation and collective calses. MIRASIERRA BALBRIUM SPA WELLNESS. Madrid
- University Diploma in Nursing, Pontificia University of Salamanca
- Nurse in Primary Care, Health Centers (Area 11)
- Academic Director, San Pablo CEU University of Alicante

Ms. Alba López, Alicia

- Staff Nurse at La Paz University Hospital
- Diploma in Nursing
- Operating room nurse in the medical sections of La Paz University Hospital: Orthopedic Surgery, Traumatologic Surgery, Plastic Surgery and General Surgery

08

Certificate

The Advanced Master's Degree in Operating Room Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

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 **Advanced Master's Degree in Operating Room Nursing** 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.

TECH is a member of the **National League for Nursing (NLN)**, the largest and most established nursing association in the world. This affiliation highlights its commitment to excellence and professional development in the healthcare field.

Accreditation/Membership

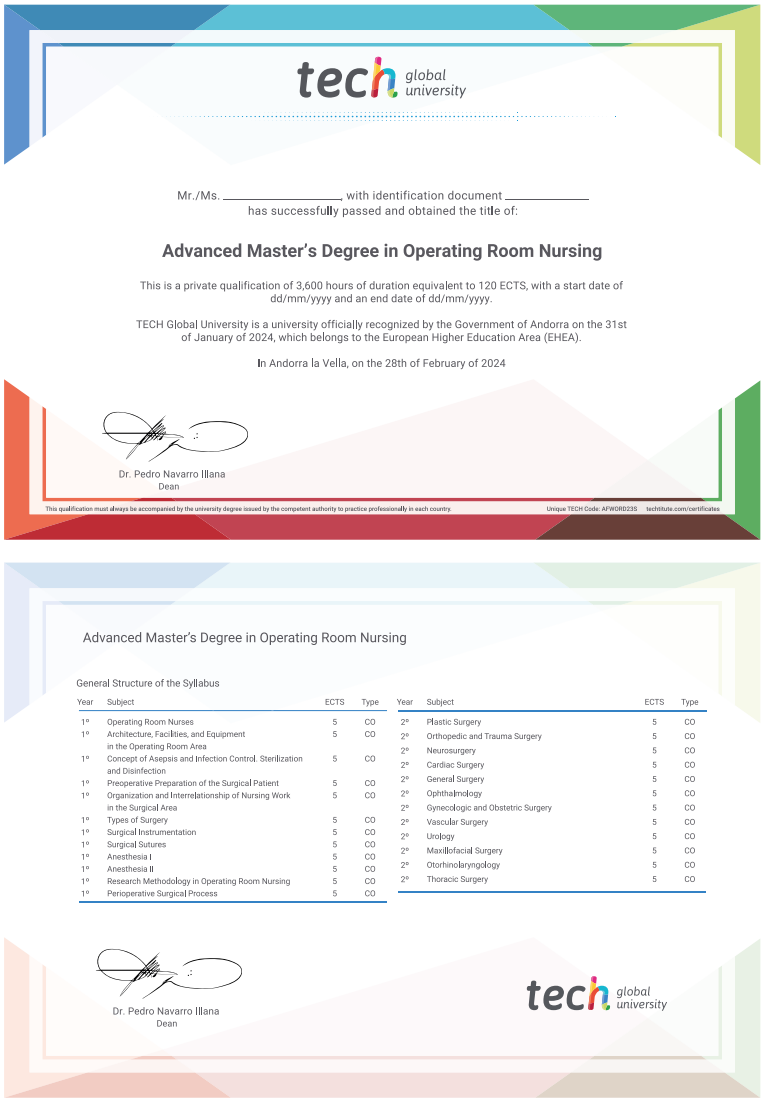
National League for Nursing

Title: **Advanced Master's Degree in Operating Room Nursing**

Modality: **online**

Duration: **2 years**

Accreditation: **120 ECTS**



tech global university

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

Advanced Master's Degree in Operating Room Nursing

This is a private qualification of 3,600 hours of duration equivalent to 120 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

Dr. Pedro Navarro Illana
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

Advanced Master's Degree in Operating Room Nursing

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Operating Room Nurses	5	CO
1º	Architecture, Facilities, and Equipment in the Operating Room Area	5	CO
1º	Concept of Asepsis and Infection Control. Sterilization and Disinfection	5	CO
1º	Preoperative Preparation of the Surgical Patient	5	CO
1º	Organization and Interrelationship of Nursing Work in the Surgical Area	5	CO
1º	Types of Surgery	5	CO
1º	Surgical Instrumentation	5	CO
1º	Surgical Sutures	5	CO
1º	Anesthesia I	5	CO
1º	Anesthesia II	5	CO
1º	Research Methodology in Operating Room Nursing	5	CO
1º	Perioperative Surgical Process	5	CO
2º	Plastic Surgery	5	CO
2º	Orthopedic and Trauma Surgery	5	CO
2º	Neurosurgery	5	CO
2º	Cardiac Surgery	5	CO
2º	General Surgery	5	CO
2º	Ophthalmology	5	CO
2º	Gynecologic and Obstetric Surgery	5	CO
2º	Vascular Surgery	5	CO
2º	Urology	5	CO
2º	Maxillofacial Surgery	5	CO
2º	Otorhinolaryngology	5	CO
2º	Thoracic Surgery	5	CO

Dr. Pedro Navarro Illana
Dean

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*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.

tech global university

Advanced Master's Degree
Operating Room Nursing

- Modality: **online**
- Duration: **2 years**
- Certificate: **TECH Global University**
- Credits: **120 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Advanced Master's Degree

Operating Room Nursing

Accreditation/Membership

National League for Nursing

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