

Master's Degree Trauma Nursing





Master's Degree Trauma Nursing

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/nursing/master-degree/master-trauma-nursing



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01

Introduction to the Program

Trauma constitutes one of the leading causes of morbidity and mortality globally, especially in the contexts of traffic accidents, falls, and sports injuries. Timely and effective care in the first hours following trauma is crucial for the patient's recovery, highlighting the importance of nursing personnel in both pre-hospital and hospital care. In this sense, rapid evaluation, the application of immobilization protocols, and the administration of pain management measures are essential to reduce complications and improve the patient's prognosis. In this context, TECH Global University launches an innovative academic program focused on Trauma Nursing Services. Furthermore, it is offered in a fully online and convenient format.



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Thanks to this 100% online Master's Degree, you will be able to provide top-quality assistance in trauma procedures and optimize patients' long-term quality of life”

The rehabilitation process in trauma care not only involves the physical recovery of the patient but also their adaptation to the temporary or permanent limitations resulting from the injury. In this context, the nursing professional plays a crucial role, as they are responsible for health education, treatment adherence, and emotional support for the patient. Implementing self-care strategies, along with effective coordination with physiotherapists and other healthcare professionals, is essential for improving the patient's functional recovery. However, the lack of standardized protocols and variability in care can negatively impact clinical outcomes.

For this reason, TECH Global University launches a revolutionary Master's Degree in Trauma Nursing. The academic itinerary covers content from primary care to specialized care, including emergency services, hospitalization units, and the operating room, which is often the most complex and least understood area, addressed holistically with the collaboration of various specialists. The program includes videos and clinical cases.

This program is designed to provide online instruction that equips students with both theoretical and practical knowledge, presented through high-quality multimedia content, expert-developed clinical case analysis, master classes, and video techniques. These resources enable the exchange of knowledge and experiences, maintaining and updating the professional level of participants, creating action protocols, and disseminating the most significant updates in the field. Through the online learning format, students will be able to organize their time and learning pace according to their personal schedules and will have access to the content from any computer or mobile device.

This **Master's Degree in Trauma 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 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 the self-assessment process can be carried out to improve learning
- ♦ Special emphasis on innovative methodologies in medicine includes theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



This university qualification will instill a sense of security in your nursing practice, helping you to grow both personally and professionally"

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You will provide specialized care in the post-operative phase of orthopedic and trauma surgeries, facilitating the recovery of patients.”

The program features a faculty composed of professionals from the field of Trauma Nursing, who bring their work experience to the program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide 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.

You will administer medications and analgesic therapies to patients with musculoskeletal injuries, ensuring proper pain management.

A curriculum based on the revolutionary Relearning methodology, which will allow you to consolidate complex concepts with efficiency and dynamism.



02

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.



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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".

Forbes

The best online university in the world

The most complete
syllabus

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.

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.

TOP
international faculty

The most effective methodology

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 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.

World's No.1
The World's largest online university

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.



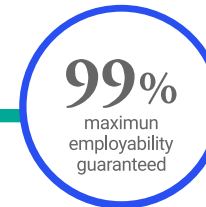
Google Premier Partner

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 structure of the content has been designed by a team of experts from prestigious hospital centers, ensuring an up-to-date and high-quality approach to the management of trauma patients. Aware of the importance of innovation in learning, the latest educational technologies have been integrated to optimize teaching. This program provides evidence-based knowledge, ensuring that the specialist acquires advanced skills in the care and management of patients with traumatic pathologies, from the acute phase to recovery, with the goal of enhancing clinical practice and delivering excellent care.



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You will assist in performing trauma procedures, including fracture reductions, application of bandages, and the placement of immobilization devices”

Module 1. Assessment and Diagnosis of the Trauma Patient for Nursing

- 1.1. Musculoskeletal Examination for Nursing
- 1.2. Medical History and Personal Interview
 - 1.2.1. Anamnesis
 - 1.2.2. Key Questions: Start, duration, frequency and location
 - 1.2.3. Main Symptoms in Traumatology
 - 1.2.3.1. Inflammatory Process
- 1.3. Objective Examination for Nursing
 - 1.3.1. Inspection of Body Alignment and Gait
 - 1.3.2. Musculotendinous Palpation
 - 1.3.3. Examination of Reflexes
 - 1.3.4. Active, Passive and Resisted Mobility
- 1.4. Nursing Assessment and Examination of the Scapulohumeral Girdle
 - 1.4.1. Inspection
 - 1.4.2. Mobility Assessment (Active, Passive and Resisted)
 - 1.4.3. Palpitation
 - 1.4.4. Specific Diagnostic Tests
- 1.5. Nursing Assessment and Examination of the Elbow, Wrist and Hand
 - 1.5.1. Inspection
 - 1.5.2. Mobility (Active, Passive and Resisted)
 - 1.5.3. Palpitation
 - 1.5.4. Specific Diagnostic Tests
- 1.6. Cervical and Thoracic Spine Assessment and Examination in Nursing
 - 1.6.1. Inspection
 - 1.6.2. Mobility (Active, Passive and Resisted)
 - 1.6.3. Palpitation
 - 1.6.4. Specific Diagnostic Tests
- 1.7. Assessment and Diagnosis of the Lumbar Spine and Pelvis for Nursing
 - 1.7.1. Inspection
 - 1.7.2. Mobility (Active, Passive and Resisted)
 - 1.7.3. Palpitation
 - 1.7.4. Specific Diagnostic Tests

- 1.8. Hip Assessment and Diagnosis for Nursing
 - 1.8.1. Inspection
 - 1.8.2. Mobility (Active, Passive and Resisted)
 - 1.8.3. Palpitation
 - 1.8.4. Specific Diagnostic Tests
- 1.9. Nursing Assessment and Examination of the Knee Ankle and Foot
 - 1.9.1. Inspection
 - 1.9.2. Mobility (Active, Passive and Resisted)
 - 1.9.3. Palpitation
 - 1.9.4. Specific Diagnostic Tests
- 1.10. Neurological Examination

Module 2. Nursing Care in Traumatic Pathology

- 2.1. Cutaneous and Musculoskeletal Traumas
 - 2.1.1. Contusions and Trauma
 - 2.1.2. Contusions and Injuries
 - 2.1.3. Characterization of Scarring
 - 2.1.4. Nursing Care in Different Wounds
- 2.2. Sprains and Dislocations
 - 2.2.1. Diagnosis and Classification
 - 2.2.2. Treatment Principles
 - 2.2.3. Main Complications
- 2.3. Tendon Ruptures
 - 2.3.1. Diagnosis and Classification
 - 2.3.2. Treatment Principles
 - 2.3.3. Main Complications
- 2.4. Amputations
- 2.5. Burns
 - 2.5.1. Classification
 - 2.5.2. Treatment and Complications
 - 2.5.3. Nursing Care of Burns
- 2.6. Trauma to the Bones. Fractures in Adults
 - 2.6.1. Diagnosis and Classification
 - 2.6.2. Treatment Principles
 - 2.6.3. Main Complications

- 2.7. Bone Trauma. Fractures in Pediatrics
 - 2.7.1. Diagnosis and Classification
 - 2.7.2. Treatment Principles and Complications
- 2.8. General Complications of Fractures
 - 2.8.1. Fat Embolism Syndrome
 - 2.8.2. Vascular-nerve Complications
 - 2.8.3. Thromboembolism
- 2.9. Local Complications of Fractures
 - 2.9.1. Compartment Syndrome
 - 2.9.2. Delayed Consolidation and Vicious Consolidation
 - 2.9.3. Sympathetic Reflex Dystrophy
 - 2.9.4. Alteration of Longitudinal Bone Growth
 - 2.9.5. Avascular Necrosis
 - 2.9.6. Joint Stiffness, Post-Traumatic Osteoarthritis and Periarticular Ossification
- 2.10. Polyfractured and Trauma Patient
 - 2.10.1. Severe Trauma Assessment
 - 2.10.2. Post-Traumatic Shock (Hypovolemic, Neurogenic, Septic, Cardiogenic)
 - 2.10.3. Nursing Care in the Different Types of Shock
- 2.11. Principles of Immobilization
- 2.12. Pharmacological Treatment
 - 2.12.1. Calcium and Vitamin D
 - 2.12.2. Inhibition of Bone Formation. Bisphosphonates. Calcitonin. Raloxifen
 - 2.12.3. Bone Formation. Strontium Ranelate. Teriparatide
- 2.13. Principles of Fracture Rehabilitation

Module 3. Nursing Care in Non-Traumatic Pathology

- 3.1. Degenerative Diseases of the Musculoskeletal System
 - 3.1.1. Arthrosis
 - 3.1.2. Arthropathies
- 3.2. Metabolic and Autoimmune Diseases
 - 3.2.1. Osteoporosis and Osteomalacia
 - 3.2.2. Rheumatoid Arthritis

- 3.3. Mobility Limitations, Stiffness and Ankylosis
- 3.4. Neurological Injuries
 - 3.4.1. Peripheral Nerve Injuries
- 3.5. Nerve Injuries due to Compression
 - 3.5.1. Carpal Tunnel Syndrome
 - 3.5.2. Tarsal Tunnel Syndrome
- 3.6. Infection in Trauma Care
 - 3.6.1. Most Frequent Infections in Traumatology
 - 3.6.2. Diagnostic Methods and Classification of Infections
 - 3.6.3. Treatment and Prophylaxis of Infection
 - 3.6.4. Osteomyelitis
 - 3.6.5. Nursing Care in Locomotor System Infections
- 3.7. Pain in Traumatology
 - 3.7.1. Diagnosis and Classification
 - 3.7.2. Treatment Principles
 - 3.7.3. Nursing Care in Pain Management
- 3.8. Inflammation Processes
 - 3.8.1. Inflammatory Process
 - 3.8.2. Main Treatments
 - 3.8.3. Nursing Care in the Inflammatory Process
- 3.9. Prevention and Health Education in Non-Traumatic Pathologies
- 3.10. Physiotherapy and Rehabilitation in Non-Traumatic Processes

Module 4. Trauma and Orthopedic Nursing in Spine Pathology

- 4.1. Anatomic-physiologic Refresher Course with the Biomechanics of the Spinal Column
- 4.2. Imaging and Diagnostic Techniques in the Spinal Column
- 4.3. Traumatic Spine Pathology
 - 4.3.1. General Overview of Spinal Fractures
 - 4.3.2. Traumatic Spinal Instability
 - 4.3.3. Spinal Cord Injury. Evaluation and Management
- 4.4. Degenerative and Disc Pathology
 - 4.4.1. Disc Herniation. Adjacent Disc Syndrome
 - 4.4.2. Osteoporotic Spinal Fractures
 - 4.4.3. Spinal Canal Stenosis
 - 4.4.4. Ankylosing Spondylitis

- 4.5. Deformities
 - 4.5.1. Scoliosis
 - 4.5.2. Spondylolisthesis
 - 4.5.3. Hyperkyphosis
 - 4.5.4. Hyperlordosis
- 4.6. Infections of the Spine
- 4.7. Rheumatic Disorders of the Spine
- 4.8. Surgical Navigation and Neurophysiological Monitoring
- 4.9. Spine Rehabilitation
- 4.10. Conservative Treatment of the Spine

Module 5. Trauma and Orthopedic Nursing in the Pathology of the Upper Limb

- 5.1. Anatomical-physiological Refresher Course
- 5.2. Techniques of Diagnostic Imaging of the Upper Limb
- 5.3. Traumatic Pathology of the Shoulder Girdle
 - 5.3.1. Clavicle Fractures and Dislocations
 - 5.3.2. Humeral Fractures
 - 5.3.3. Rotator Cuff Tears and Slap Lesions
- 5.4. Traumatic Pathology of the Elbow and Forearm
 - 5.4.1. Olecranon and Radial Head Fractures
 - 5.4.2. Post-Traumatic Stiffness
- 5.5. Traumatic Pathology of the Hand and Wrist
 - 5.5.1. Metacarpal Fractures
- 5.6. Non-traumatic Pathology of the Scapulohumeral Girdle
 - 5.6.1. Glenohumeral Arthrosis
 - 5.6.2. Subacromial Syndrome
 - 5.6.3. Shoulder Instability
- 5.7. Non-traumatic Pathology of the Elbow and Forearm
 - 5.7.1. Arthrosis
- 5.8. Non-traumatic Pathology of the Hand
- 5.9. Physiotherapy and Rehabilitation of the Upper Limbs
- 5.10. Nursing Care of the Patient with Upper Limb Injuries

Module 6. Trauma and Orthopedic Nursing in Lower Limb Pathology

- 6.1. Anatomical-physiological Refresher Course
- 6.2. Techniques of Diagnostic Imaging of the Lower Limb
- 6.3. Traumatic Pelvis and Hip Pathology
 - 6.3.1. Pelvis and Hip Fractures
 - 6.3.2. Hip Dislocation
- 6.4. Traumatic Pathology of the Lower Limbs
 - 6.4.1. Fractures of the Femur, Tibia and Fibula
 - 6.4.2. Ankle and Foot Fractures
- 6.5. Non-traumatic Pathology of the Lower Limbs
 - 6.5.1. Coxarthrosis
 - 6.5.2. Gonarthrosis
- 6.6. Pathology of the Extensor Apparatus
 - 6.6.1. Anterior Cruciate Ligament
 - 6.6.2. Posterior Cruciate Ligament
- 6.7. Ankle Pathology
- 6.8. Foot Pathology
- 6.9. Physiotherapy and Rehabilitation of the Lower Limbs
- 6.10. Nursing Care in Pathologies of the Lower Limbs

Module 7. Nursing Care in Orthogeriatrics

- 7.1. Nursing Assessment and Diagnosis in the Elderly
 - 7.1.1. Assessment Scales in the Elderly
- 7.2. Special Considerations for the Elderly Population
 - 7.2.1. Home and Residential Care
 - 7.2.2. Drug use in the Elderly
- 7.3. Major Geriatric Syndromes
 - 7.3.1. Constipation and Urinary Incontinence
 - 7.3.2. Mild Cognitive Impairment and Acute Confusional Syndrome
 - 7.3.3. Malnutrition
 - 7.3.4. Depression

- 7.4. Major Geriatric Syndromes in Trauma
 - 7.4.1. Gait Disturbance (Orthopedics and Assistive Devices)
 - 7.4.2. Falls as a Geriatric Syndrome
 - 7.4.3. Sarcopenia
- 7.5. Prevention and Promotion of Musculoskeletal Health in the Elderly
- 7.6. Geriatric Surgical Patient
 - 7.6.1. Prevention of Perioperative Complications in the Elderly Patient
 - 7.6.2. Preparation for Intervention
 - 7.6.3. Antithromboembolic Prophylaxis
 - 7.6.4. Pathologies and Drugs Contraindicating Early Surgery
- 7.7. Postoperative Period in the Elderly in Traumatology
 - 7.7.1. Anemia as a Prognostic Factor. Transfusion Saving Measures
- 7.8. Nursing Care of the Elderly with Traumatic Pathology
- 7.9. Nursing Care of the Elderly with no Traumatic Pathology
 - 7.9.1. Care Plans for the Orthopedic Geriatric Patient
- 7.10. Principles of Physiotherapy in Geriatrics

Module 8. Trauma and Orthopedic Nursing in Musculoskeletal Tumors

- 8.1. Oncology in Traumatology
- 8.2. Primary Bone Tumors, Bone-forming
 - 8.2.1. Primary Malignant Tumors
 - 8.2.2. Primary Intermediate Tumors
 - 8.2.3. Benign Primary Tumors
- 8.3. Primary Bone Tumors, Cartilage-forming
 - 8.3.1. Chondrosarcoma
 - 8.3.2. Chondroblastoma
- 8.4. Giant Cell Tumor
 - 8.4.1. Malignant Giant Cell Tumor
 - 8.4.2. Intermediate Giant Cell Tumor
 - 8.4.3. Benign Giant Cell Tumor

- 8.5. Malignant Round Cell Tumors (Bone Marrow)
- 8.6. Vascular Tumours
 - 8.6.1. Malignant tumours
 - 8.6.2. Intermediate Tumors
 - 8.6.3. Benign Tumors
- 8.7. Malignant Soft Tissue Tumors
- 8.8. Benign Soft Tissue Tumors
- 8.9. Bone Metastases
- 8.10. Nursing Care in Oncologic Patients in Trauma Orthopedic Surgery

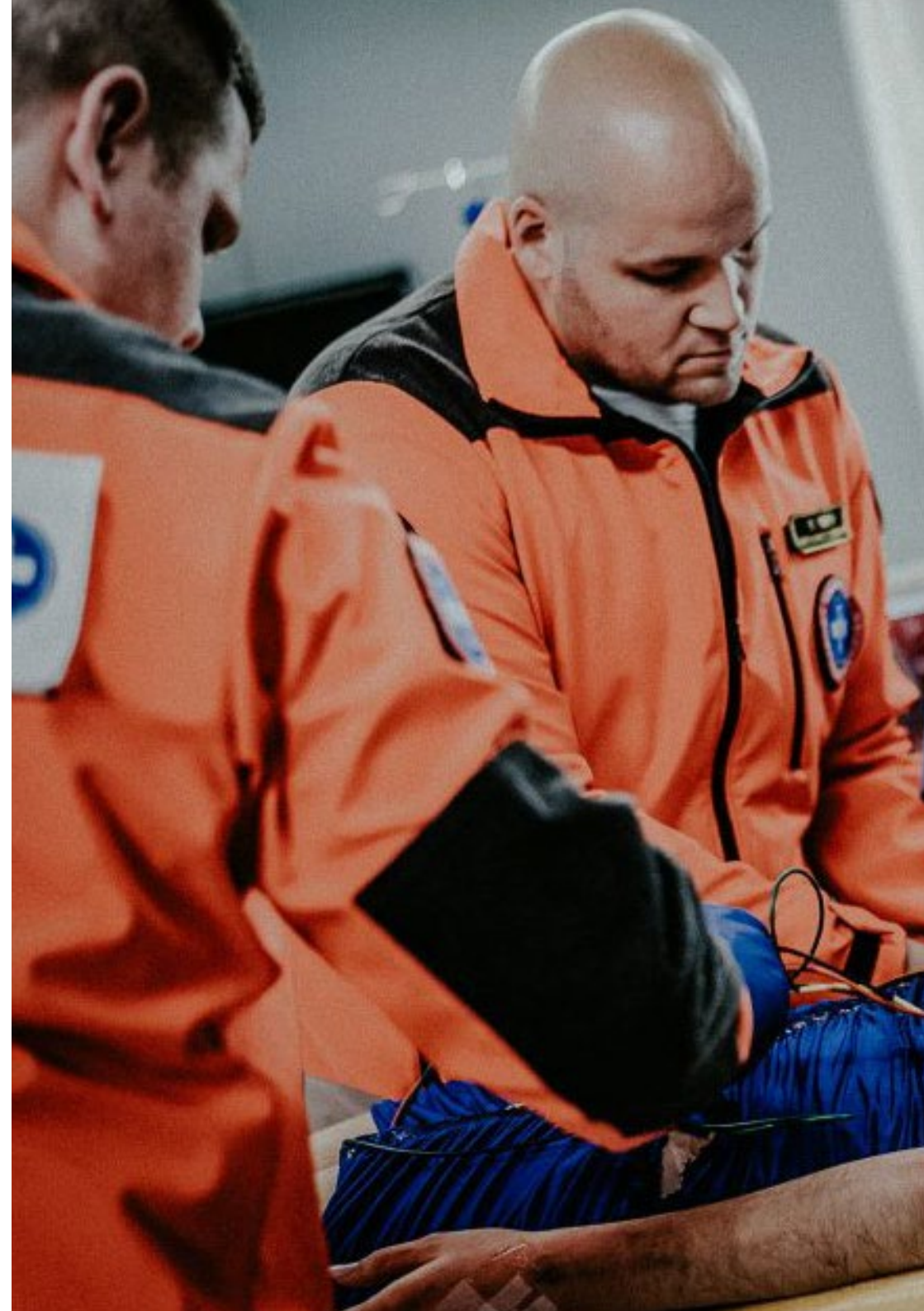
Module 9. Nursing Care in the Trauma Surgery Operating Room

- 9.1. Asepsis and Antisepsis
 - 9.1.1. Sterilization
- 9.2. Patient Positioning in the TOC Operating Room
 - 9.2.1. Surgical Positions
 - 9.2.2. Key Aspects of Placing the Patient in Proper Surgical Positioning
- 9.3. Surgical Ischemia
 - 9.3.1. Application Methods
 - 9.3.2. Complications and Contraindications of Ischemia
- 9.4. Anesthesia in Traumatology
 - 9.4.1. Patient Monitoring
 - 9.4.2. Main Anesthetic Techniques in Traumatology
- 9.5. Materials Used in the Traumatology Operating Room
 - 9.5.1. Biomaterials
 - 9.5.2. Metals, Polymers and Ceramics
 - 9.5.3. Principles of Surgical Cementation
- 9.6. Bone Grafts and Tissue Bank
 - 9.6.1. Biological Bone Grafts
 - 9.6.2. Synthetic Bone Grafts
 - 9.6.3. Tissue Bank. Bone and Tissue Explant
- 9.7. Instrumentation in the Main Traumatologic Surgical Techniques
 - 9.7.1. Basic Instruments in Traumatology
 - 9.7.2. Instruments in Osteosynthesis. The Surgical Reduction of Fractures
 - 9.7.3. Instrumentation in Minimally Aggressive Techniques

- 9.8. Instrumentation in the Main Orthopedic Surgical Techniques
 - 9.8.1. Instrumentation in Arthroscopic Surgery
 - 9.8.2. Instrumentation in Arthroplasty Surgery
 - 9.8.3. Instrumentation in Spinal Surgery
- 9.9. Main Complications in the Trauma Operating Room
 - 9.9.1. Complications of the Different Surgical Positions
 - 9.9.2. Most Frequent Anesthetic Complications in the Trauma Operating Room
 - 9.9.3. Bone Cement Implantation Syndrome
- 9.10. Nursing Care in Surgical Patients in TOC
 - 9.10.1. Surgical Checklist
 - 9.10.2. Surgical Infection Project ZERO
 - 9.10.3. Surgery in the Context of Covid-19 and Multidrug-Resistant Infections

Module 10. Nursing Care in Trauma Hospitalization

- 10.1. Assessment of Hospitalized Patients in the Traumatology Unit
- 10.2. Multidisciplinary Treatment of Patients in the Trauma Unit
 - 10.2.1. Pharmacological Treatments
 - 10.2.2. Use of Hot-Cold Therapies
- 10.3. Nursing Care for Postoperative TOC Patients
 - 10.3.1. Nursing Care after Trauma Surgery
 - 10.3.2. Nursing Care after Orthopedic Surgery
 - 10.3.3. Nursing Care after Spine Surgery
- 10.4. Immobilization of Patients in the Different Trauma Processes
 - 10.4.1. Safe Immobilization and Body Alignment Techniques
 - 10.4.2. Effects of Immobilization
 - 10.4.3. Assessment and Care of Patients in Splints and Casts
 - 10.4.4. Assessment and Care of Patients with Skin and Skeletal Traction
- 10.5. Mobilization of Patients in Different Trauma Processes
 - 10.5.1. Safe Mobilization Techniques
 - 10.5.2. Lifting and Ambulation Techniques





- 10.6. Risk Assessment and Prevention of Pressure Ulcers in Trauma Patients
 - 10.6.1. General Concepts about Pressure Ulcers (PU's)
 - 10.6.2. Most used Scales
- 10.7. Nutrition in Trauma Patients
 - 10.7.1. Nutritional Assessment in Trauma Patients
 - 10.7.2. Use of Nutritional Supplements
- 10.8. Rapid Recovery Program in Trauma Surgery
 - 10.8.1. Fast-Track Recovery (Rapid Recovery)
- 10.9. Inpatient Care Safety
 - 10.9.1. RNAO Best Practice Guidelines
 - 10.9.2. Recommendations for what "not to do"
- 10.10. Standardized Care Plans in OTS Hospitalization
 - 10.10.1. Standard Plan: Disc Hernia
 - 10.10.2. Standard Plan: Hip Fracture
 - 10.10.3. Standard Plan: Knee Prosthesis

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You will apply protocols for the prevention of Pressure Ulcers and Thromboembolism in patients with prolonged immobilization”

04

Teaching Objectives

This program from TECH is designed to provide nursing professionals with the necessary tools to comprehensively address the care of trauma patients. Through an innovative approach based on the latest scientific evidence, it trains specialists in advanced techniques for assessment, diagnosis, and treatment in traumatology. The learning objectives of this Master's Degree ensure that graduates develop competencies in hospital, surgical, and rehabilitative care, lead improvement projects in patient care, and significantly contribute to optimizing nursing processes in Trauma Care.





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With this program, you can update your knowledge in traumatology by using the latest educational technology, optimizing decision-making and improving care, follow-up, and support for patients with traumatic pathologies”



General Objectives

- ♦ Provide the professional with advanced theoretical and practical knowledge that will allow them to perform excellently in the trauma service, ensuring specialized care at every stage of patient treatment
- ♦ Describe the role of the nursing professional in each of the trauma services
- ♦ Refine techniques for exploration, diagnosis, and treatment in Traumatology
- ♦ Implement evidence-based strategies to optimize the management of trauma patients



Take the opportunity to acquire advanced knowledge in Traumatology and improve the quality of care in the hospital setting”





Specific Objectives

Module 1. Assessment and Diagnosis of the Trauma Patient for Nursing

- ♦ Gain in-depth knowledge of various exploration and assessment techniques in traumatology
- ♦ Manage interview methods and diagnostic techniques in the traumatology field

Module 2. Nursing Care in Traumatic Pathology

- ♦ Acquire specific knowledge about fractures, treatments, and complications
- ♦ Specialize in nursing interventions in trauma emergencies

Module 3. Nursing Care in Non-Traumatic Pathology

- ♦ Analyze prevalent pathologies such as osteoporosis and osteoarthritis in-depth
- ♦ Apply care strategies for patients with non-traumatic musculoskeletal conditions

Module 4. Trauma and Orthopedic Nursing in Spine Pathology

- ♦ Gain updated knowledge on spinal pathologies
- ♦ Implement surgical, conservative, and rehabilitative treatments for vertebral conditions

Module 5. Trauma and Orthopedic Nursing in the Pathology of the Upper Limb

- ♦ Specialize in the diagnosis and treatment of shoulder, elbow, and hand pathologies
- ♦ Apply advanced assessment and rehabilitation techniques

Module 6. Trauma and Orthopedic Nursing in Lower Limb Pathology

- ♦ Acquire knowledge of hip, knee, and foot pathologies
- ♦ Apply diagnostic and treatment techniques for lower extremity musculoskeletal conditions

Module 7. Nursing Care in Orthogeriatrics

- ♦ Instruct nursing professionals in the comprehensive care of elderly patients with traumatic conditions
- ♦ Dive into the specific care for ortho-geriatric patients

Module 8. Trauma and Orthopedic Nursing in Musculoskeletal Tumors

- ♦ Analyze primary and palliative treatments in orthopedic oncology
- ♦ Develop personalized care plans for oncological patients

Module 9. Nursing Care in the Trauma Surgery Operating Room

- ♦ Handle advanced knowledge of surgical techniques in traumatology
- ♦ Specialize in postural and specific operating room care
- ♦ Identify and address intraoperative complications in trauma surgery
- ♦ Stay updated on patient safety protocols in surgery

Module 10. Nursing Care in Trauma Hospitalization

- ♦ Plan and manage nursing care for patients hospitalized due to trauma
- ♦ Integrate updated knowledge to optimize trauma care practices

05

Career Opportunities

This comprehensive university program from TECH represents a unique opportunity for nursing professionals who wish to update their skills and specialize in the field of Traumatology. Through advanced knowledge and an innovative methodology, graduates will be able to expand their job opportunities in various healthcare settings, mastering the most advanced techniques in the management of trauma patients.



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You will apply the latest advances in traumatology to offer specialized care and improve the recovery of patients with musculoskeletal pathologies”

Graduate Profile

Graduates of this TECH Master's Degree will be highly trained professionals in the comprehensive care of trauma patients. They will possess advanced skills in the evaluation, diagnosis, and treatment of musculoskeletal pathologies, applying cutting-edge techniques in hospitalization, the operating room, and rehabilitation. Additionally, they will be prepared to manage standardized care plans, optimizing patient recovery based on the latest scientific evidence. Their education will enable them to lead multidisciplinary teams, participate in research projects, and contribute to the continuous improvement of trauma care processes.

You will be able to work excellently as a nurse in any trauma unit, providing advanced care based on the best scientific evidence.

- ♦ **Specialized Care in Traumatology:** Mastery of advanced techniques in the care of patients with fractures, musculoskeletal injuries, and postoperative care.
- ♦ **Intervention in Emergencies and Surgery:** Ability to assist in surgical procedures and manage trauma emergency treatments.
- ♦ **Pain Management and Rehabilitation:** Implementation of strategies for pain control and monitoring patient progress during functional recovery.
- ♦ **Interdisciplinary Collaboration:** Teamwork with surgeons, physiotherapists, and other healthcare professionals to improve trauma patient care.



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

- 1. Nurse in Trauma and Orthopedics Units:** Specialist in the care of patients with fractures, dislocations, and musculoskeletal injuries.
- 2. Operating Room Nurse in Trauma Surgery:** Responsible for assisting in surgical procedures and providing postoperative care.
- 3. Specialist in Trauma Emergencies:** Managing patients with severe trauma in emergency services.
- 4. Coordinator of Trauma Hospitalization:** Responsible for planning and implementing standardized care for hospitalized patients.
- 5. Consultant in Rehabilitation and Physiotherapy:** Supporting functional recovery and planning post-trauma therapies.



Become an expert in advanced trauma care and lead the recovery of patients with musculoskeletal injuries"



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.

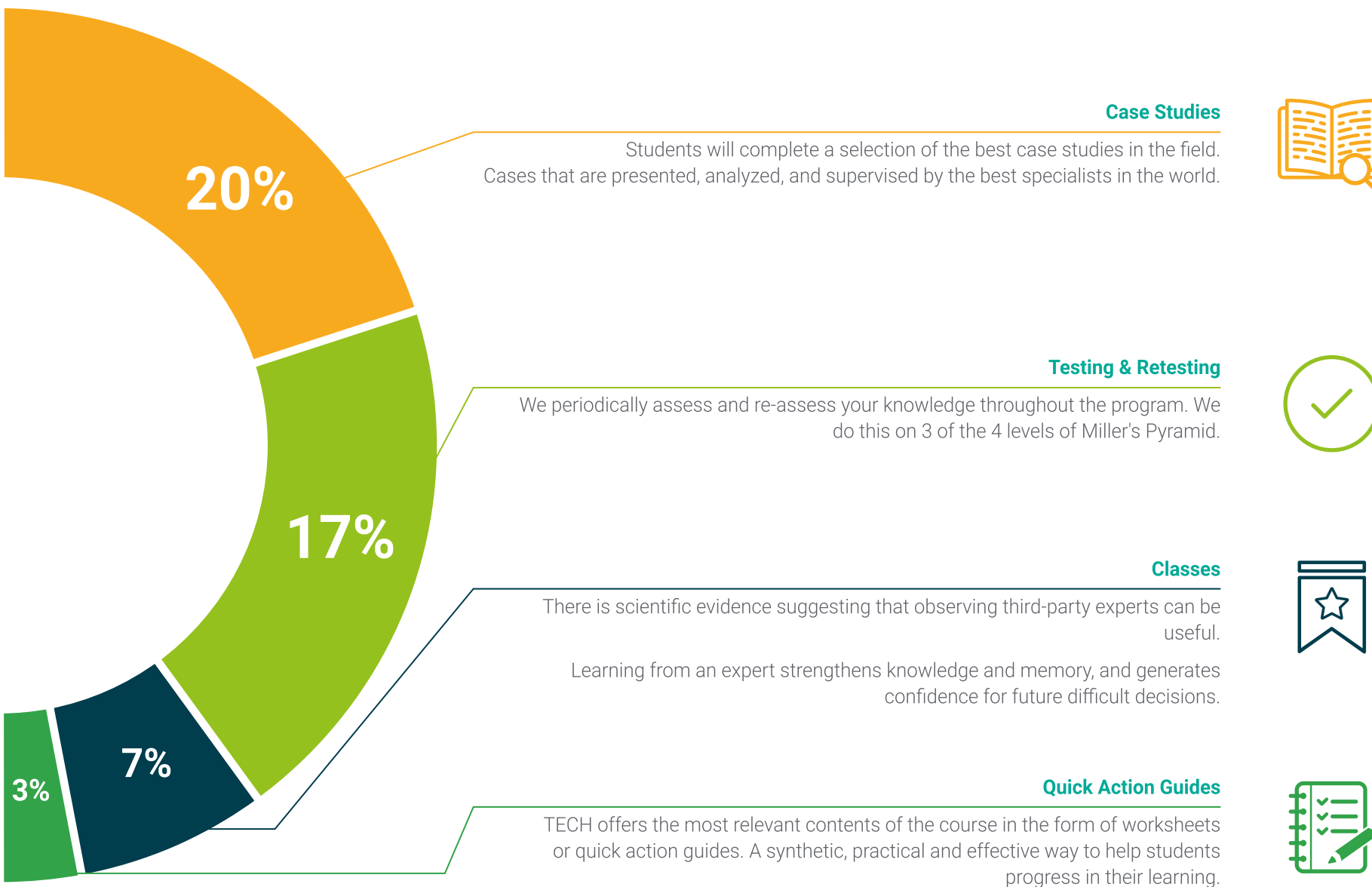
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





07

Teaching Staff

The program boasts a teaching staff made up of renowned specialists in Trauma Nursing, who contribute their practical experience and up-to-date knowledge. Additionally, it includes the participation of highly respected experts from various areas of traumatology, ensuring an interdisciplinary approach. Through their contributions, the program's content is enriched with real clinical cases, innovative methodologies, and advanced intervention strategies. This dedicated teaching team, committed to academic excellence, provides a rigorous and applied study, aimed at enhancing the specialist's ability to deliver high-quality care in the hospital and surgical trauma settings.



“

*Stay up to date with the latest advancements
in procedures within Trauma Nursing, guided
by leading experts in the field”*

Management



Ms. Alvarez Calvo, Alicia

- Instrumental Nurse in Traumatology
- Instrumental Nurse at Sagrado Corazón Cardiology Institute
- Instrumental Nurse at Sagrado Corazón Cardiology Institute
- Instrumental Nurse at the Valladolid Interventional Medicine Center
- Emergency Nurse in Primary Healthcare of Castilla y León (SACYL)
- Associate Professor of Surgical Pathologies in Traumatology at the European University Miguel de Cervantes' Physiotherapy Degree
- Diploma in Nursing from the University of Valladolid
- Public Health Diploma
- Master's Degree in Clinical Process Resolution from the University of Alcalá
- University Expert in Emergencies from the European University Miguel de Cervantes
- Collaborator in Practical Training for the Nursing Degree at the University of Valladolid
- Member of: Spanish Association of Nurses in Traumatology and Orthopedics (AEETO), Spanish Association of Vascular and Wound Nurses (AEEVH)

Teachers

Dr. León Andrino, Alejandro Ángel

- ♦ Specialist in Traumatology and Orthopedic Surgery
- ♦ Medical Director and Traumatologist at Plenum Clinic, Valladolid
- ♦ Deputy Chief of Emergency Services at the University Hospital of Valladolid's Emergency Plan
- ♦ Traumatologist and Orthopedic Surgeon at Recoletas Campo Grande Hospital, Valladolid
- ♦ Consultant for Stryker Ibérica in the Sport Medicine Area
- ♦ Member of the Transfusion Committee at the University Hospital of Valladolid
- ♦ Quality Agent for the Traumatology and Orthopedic Surgery Service at the University Hospital of Valladolid
- ♦ Implementer of the UNE-EN-ISO 9001-2000 Quality System
- ♦ Resident Tutor in Specialized Teaching
- ♦ Associate Professor of Surgical Pathologies in the Physiotherapy Degree at the European University Miguel de Cervantes
- ♦ Associate Professor of Surgical Pathologies in the Occupational Therapy Degree at the European University Miguel de Cervantes
- ♦ Honorary Collaborator at the Surgery Department of the University of Valladolid's Medical Faculty
- ♦ Honorary Collaborator at the Chemical Engineering Department of the School of Industrial Engineering, University of Valladolid
- ♦ Doctor in Surgery Research from the University of Valladolid
- ♦ Doctor in Health Sciences from the Medical Faculty, University of Valladolid
- ♦ Bachelor's Degree in Medicine and Surgery from the University of Valladolid
- ♦ Training at Mount Sinai Hospital, Juiz de Fora, Brazil
- ♦ Specialized in Traumatology and Orthopedic Surgery via the MIR Program at the University Hospital of Valladolid

- ♦ Rotation at Mayo Clinic, Rochester, Minnesota
- ♦ Rotation at the Humanitas Clinical Institute in Milan through the SECOT European Fellowship
- ♦ Awarded the Miguel Cabanela Travelling Fellowship by SECOT
- ♦ Member of: Spanish Society of Orthopedic Surgery and Traumatology (SECOT), Spanish Society of Shoulder and Elbow Surgery (SECHC), Official College of Physicians of Valladolid

Mr. Álvarez Brewers, Héctor

- ♦ Specialist in Clinical Physiotherapy
- ♦ Physiotherapist at Medrano Clinic
- ♦ Founder of Medrano Physiotherapy in Palencia
- ♦ Bachelor's Degree in Physiotherapy

Dr. Santiago Maniega, Silvia

- ♦ Medical Specialist in Orthopedic Surgery and Traumatology
- ♦ Specialist in the Spine Unit at the University Hospital of Valladolid (HCUV)
- ♦ Bachelor's Degree in Medicine and Surgery from the University of Salamanca
- ♦ Specialist in Orthopedic Surgery and Traumatology

Ms. Nicolas Sacristán, Teresa

- ♦ Nurse at the University Hospital of Valladolid (HCUV)
- ♦ Diploma in Nursing
- ♦ Specialist in Mental Health
- ♦ Member of the Quality Committee at HCUV

Ms. Cabero García, Begoña

- ♦ Specialized Nurse in Traumatology
- ♦ Nurse at the University Hospital of Valladolid (HCUV)
- ♦ Bachelor's Degree in Nursing from the University of Valladolid and University of León

Mr. Mate Espeso, Adriano

- ♦ Head Nurse in the Pediatric Emergency Unit at the University Hospital of Valladolid (HCUV)
- ♦ Supervisor of Pediatric Emergency Nursing at HCUV
- ♦ Special Services Nurse at HCUV
- ♦ Hospitalization Nurse at Gregorio Marañón Hospital, Madrid
- ♦ Bachelor's Degree in Nursing from the University of León
- ♦ Master's Degree in Socio-Health Sciences Research from the University of León
- ♦ Master's Degree in Healthcare Service Management from the University of León

Ms. García Caridad, Laura

- ♦ Trauma Nurse at the University Hospital of Valladolid (HCUV)
- ♦ Specialized Obstetric-Gynecological Nurse at Donostia University Hospital
- ♦ Expert in Assisted Reproduction Nursing at the Rey Juan Carlos University URJC and Spanish Fertility Society
- ♦ Bachelor's Degree in Nursing from the University of Salamanca





“

A unique, essential and decisive learning experience to boost your professional development"

08 Certificate

The Master's Degree in Trauma 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 **Master's Degree diploma in Trauma 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.

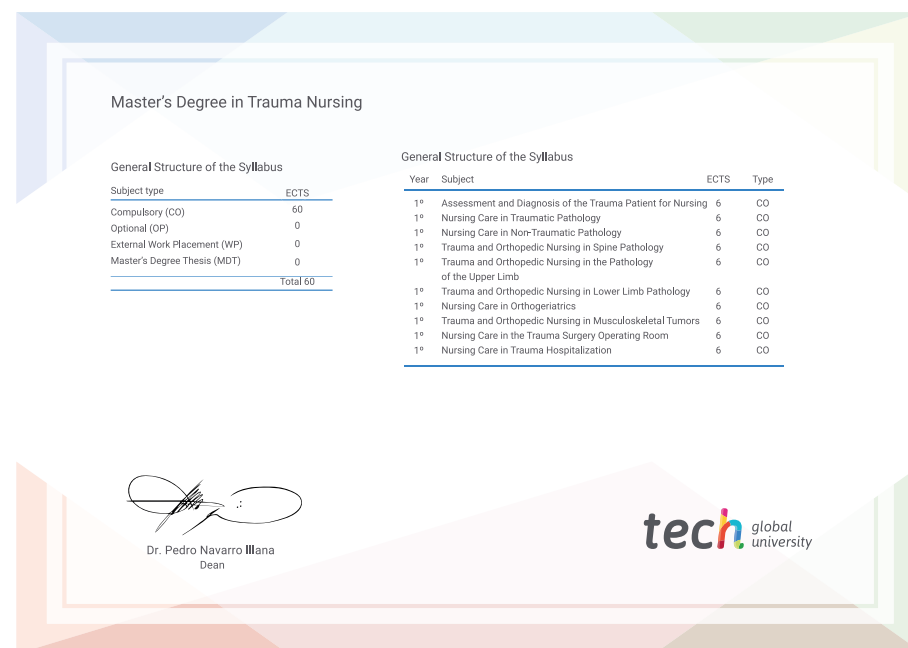
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Master's Degree in Trauma Nursing**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**



future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present quality
development language
virtual classroom



Master's Degree Trauma Nursing

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Master's Degree Trauma Nursing