



Postgraduate Certificate

Surgery of Soft Parts of the Hand

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

 $We bsite: {\color{blue}www.techtitute.com/us/medicine/postgraduate-certificate/surgery-soft-parts-hand}$

Index

> 06 Certificate

> > p. 30





tech 06 | Introduction

The specialized literature in Hand Surgery has focused on the new reconstruction techniques using free flaps. These procedures have yielded satisfactory results, requiring excellent knowledge and training on the part of the surgeon. At the same time there have been significant advances in Microsurgery, therefore facilitating less invasive operations.

All this, leads specialists to be in a continuous updating of their knowledge and skills to perform the most advanced therapeutic treatments. For this reason, TECH has designed this Postgraduate Certificate in Surgery of Soft Parts of the Hand of only 6 weeks duration.

An academic itinerary that provides students with an effective update in a short time and in an intensive manner. To achieve this objective, the expert teaching team in Hand Surgery that has developed this syllabus provides the graduate with the most current content on the management of hand wounds, from simple wounds to reimplantation to hand reconstruction by means of flaps, complex wound reconstruction, finger reimplantation and fingertip coverage or extravasation injuries and high pressure injections.

A comprehensive syllabus complemented by teaching resources based on video summaries, multimedia pills, specialized readings and clinical case simulation scenarios, available at any time, through any digital device with an internet connection.

An excellent opportunity to keep abreast of advances in this field, under the highest scientific rigor and through a flexible didactic methodology. The student will only need a cell phone, *tablet* or computer with internet connection to view the content of this program 24 hours a day. An academic option that adapts to the agenda and motivations of healthcare professionals.

This **Postgraduate Certificate in Surgery of Soft Parts of the Hand** 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 Upper Limb Surgery, Orthopedic Surgery and Traumatology
- 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
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection





Delve from the comfort of your home into the most effective techniques for performing finger reimplantation in the Emergency Room"

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

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

If you have a digital device with internet connection you will be able to access the advanced content of this syllabus 24 hours a day.

A program that will allow you to perform a high degree of analysis of the management of the burned hand with quality multimedia material.







tech 10 | Objectives



General Objectives

- Update knowledge in the different medical and basic specialties surrounding hand pathology
- Determine the types of wound healing, sutures and skin grafts to specify the treatment of less complex wounds; escalating to the management of complex wounds
- Analyze the basic anatomy of the wrist and hand to provide a starting point from which to recognize injuries that may occur after trauma or injury of any kind
- Structure the bony and ligamentous anatomy of metacarpals and phalanges of the hand
- Analyze different surgical approaches to the hand
- Compile current arthroscopic treatment methods
- Establish general criteria for the anatomy and pathophysiology of osteoarthritis in the various joints of the wrist and hand
- Analyze in detail the anatomy of the flexor and extensor tendons of the hand, as well as the detailed development of their vascularization and the biology of tendon healing
- Homogenize knowledge and skills in the pathology of the peripheral nerve of the upper limb and brachial plexus
- Update diagnostic and therapeutic knowledge based on the fundamental principles of nerve and brachial plexus injuries
- Guide the different therapeutic options (conservative and surgical) as well as the appropriate time to perform them

- Examine the different surgical techniques used in the treatment of the different pathologies of the pediatric upper limb
- Delve into the anatomical and pathophysiological knowledge of Dupuytren's disease through physical examination and accurate use of the classification of the disease, to determine the appropriate timing of surgical treatment
- Analyze the surgical techniques available in primary and relapsed Dupuytren's disease and the sequelae of previous treatments
- Show the advantages of ultrasound for daily practice in Traumatology
- Explore occupational hand-wrist injuries
- Develop the latest technological advances in Hand Surgery





Specific Objectives

- Examine types of hand wounds, wound healing and types of sutures
- Delve into the knowledge of skin grafts
- Analyze the use of microsurgery for skin coverage in the Hand, as well as for reimplantation
- Analyze infections of the hand, cellulitis, tenosynovitis, arthritis and osteomyelitis
- Determine detailed management of the burned hand and its consequences



Inquire with total comfort into the procedures for evaluating injuries caused by high-pressure injections and extravasation injuries from comfort"







tech 14 | Course Management

Management



Dr. Ríos García, Beatriz

- Medical Specialist in Orthopedic Surgery and Traumatology in the Hand and Microsurgery Unit at the Monographic Hospital of Orthopedic Surgery and Traumatology ASEPEYO
- Medical Specialist in Orthopedic Surgery and Traumatology (Dr. Rayo and Amaya Team) at the Hospital San Francisco de Asís
- Resident Tutor at the Hospital ASEPEYO
- Medical Specialist in Hand Surgery (Dr. de Haro Team) at the San Rafael Hospital
- Teacher of Knee, Shoulder, Osteosynthesis, Locomotor System and Ultrasound Pathology Courses
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Member of: Spanish Society of Orthopedic Surgery and Traumatology, Spanish Society of Orthopedic Surgery and Traumatology, Spanish Society of Hand Surgery and Microsurgery



Dr. Valdazo Rojo, María

- Traumatology and Orthopedic Surgery Service at the Hospital Universitario San Francisco de Asis
- Traumatology and Orthopedic Surgery Area Specialist at the Hospital Fundación Jiménez Díaz
- Specialist in Traumatology and Orthopedic Surgery at the Albacete University Hospital Complex
- Professor of Medicine at the Universidad Alfonso X el Sabio, Madrid
- Professor of Medicine at the Autonomous University of Madrid
- Professor of Medicine at the University of Albacete
- PhD in Medicine and Surgery from the Complutense University of Madrid
- Graduated from the Universidad Autónoma de Madrid



Course Management | 15 tech

Professors

Dr. Vanaclocha Saiz, María Nieves

- * Assistant Specialist in Plastic, Aesthetic and Reconstructive Surgery at the University and Polytechnic Hospital La Fe
- * Second Assistant Surgeon in Cardiovascular Surgery at the St. Josefs-Hospital Wiesbaden
- Cooperative Campaign in the Reconstructive Surgery Project at the non-profit association Viva Makeni in Sierra Leone
- Doctor Cum Laude
- Applied Master in Quality of Care at the Universitata de Barcelona
- Master in Management and Organization of Hospitals and Health Services by the Polytechnic University of Valencia
- Member of Sociedad Española de Cirugía Plástica, Estética y Reconstructiva (SECPRE)
 y Sociedad Valenciana de Cirugía Plástica, Reparadora y Estética (SCPRECV)

Dr. González - Cuevas, Javier Fernández

- Teacher in courses on Trauma for Pediatric Emergency and Plastic Surgery nurses
- Master's Degree in Advanced Care of Ulcers of the Lower Extremity
- Postgraduate Diploma in Surgical Anatomy of the Hand
- Degree in Medicine and Surgery, Faculty of Medicine, Oviedo University
- Member of Spanish Society of Reconstructive and Aesthetic Plastic Surgery, Spanish
 Association of Senology and Breast Pathology, Society of Aesthetic and Reconstructive
 Plastic Surgeons of Asturias, Cantabria and Castilla-León, International Society of Plastic
 and Aesthetic Surgery and Spanish Association of Microsurgery

tech 16 | Course Management

Dr. Muñoz, Francisca

- Nurse in Primary Care Centers
- Nurse in the Mutua ASEPEYO Health Care Center
- Nurse in ICU, Emergency and Operating Room
- Course teacher at ASEPEYO Corporate University
- Member of the Nursing Advisory Committee of the Spanish Society of Occupational Traumatology

Dr. Vallejo Aparicio, Eduardo

- Specialist in Plastic, Aesthetic and Reconstructive Surgery at the University Hospital of Burgos
- Degree in Medicine from the Universidad Rey Juan Carlos
- Master in Clinical Medicine by UDIMA
- Member of Spanish Society of Plastic, Aesthetic and Reconstructive Surgery, Society of Plastic, Aesthetic and Reconstructive Surgeons of Asturias, Cantabria and Castilla y León

Dr. Nevado Sánchez, Endika

- Coordinator of upper limb reimplantation through the national transplant organization
- Graduate in Medicine and Surgery from the University of the Basque Country
- Associate Professor at the University of Burgos
- Specialist in Aesthetic and Reconstructive Plastic Surgery
- Specialist in Hand Surgery
- Judicial Expert in valuation of bodily injury





Course Management | 17 tech

Dr. Gómez Lanz, Carlos Arcadio

- Specialist in Plastic, Aesthetic and Reconstructive Surgery at the Burgos Hospital Complex
- Member of the reimplantation team of the CSUR center of the HUBU in catastrophic hand and upper limb reimplantation
- Member of the Sarcoma Treatment Unit of the Burgos Hospital Complex
- Member of the Head and Neck Tumor and Complex Pathology Treatment Unit of the Burgos Hospital Complex
- Graduate in Medicine and Surgery from the Complutense University of Madrid
- Master's Degree in Continuing Education in Aesthetic Medicine and Surgery from the European University Miguel de Cervantes

Dr. Palmero Sánchez, Beatriz

- * Specialist Doctor in Plastic, Esthetic, and Reconstructive Surgery
- Degree in Medicine from the University of Cantabria

Dr. Sánchez García, Alberto

- Specialist in Plastic, Reconstructive and Aesthetic Surgery at the Hospital Universitario y Politécnico La Fe de Valencia
- Teacher in courses of the University of Valencia and Spanish Anatomical Society
- Graduated in Medicine from the University of Castilla La Mancha (UCLM), Faculty of Albacete
- Doctor of Medicine and Surgery from the University of Valencia, with a grade of outstanding Cum Laude
- Master in Aesthetic Medicine and Surgery by the European University Miguel de Cervantes



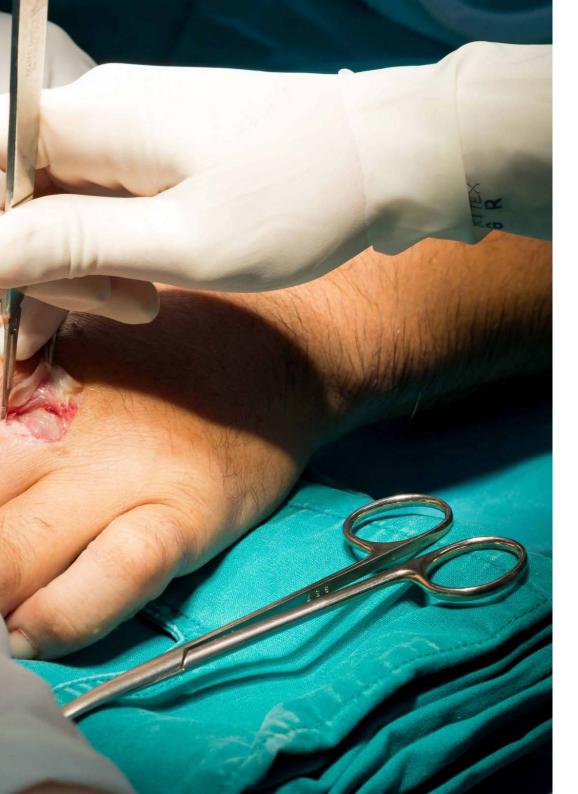


tech 20 | Structure and Content

Module 1. Hand Skin, Soft Parts and Infections

- 1.1. Wounds and types of healing. Sutures. Skin grafts
 - 1.1.1. Hand wounds and types of sutures
 - 1.1.2. Types of healing
 - 1.1.3. Skin Grafts
- 1.2. Basics of the vascular anatomy of the hand applied to the realization of flaps
 - 1.2.1. Vascular anatomy of the hand
 - 1.2.2. Pedicle Flaps
 - 1.2.3. Grafts, from where and for where
- 1.3. Complex Wound Management
 - 1.3.1. Initial Assessment
 - 1.3.2. Evolution of the event
 - 1.3.3. Advanced Cure Systems
- 1.4. Microsurgery
 - 1.4.1. Bases of microsurgery on the hand
 - 1.4.2. Microsurgical suturing of nerves and vessels
 - 1.4.3. Use of microsurgery for flaps
- 1.5. Reimplantation. Fingertip coverage
 - 1.5.1. Reimplants except thumb
 - 1.5.2. Fingertip coverage except for the thumb
 - 1.5.3. Reimplantation on the thumb, thumb tip coverage
- 1.6. Skin coverage with pedicled and free flaps on wrist and hand
 - 1.6.1. Pedicle flaps on the Wrist
 - 1.6.2. Pedicled flaps in hand
 - 1.6.3. Free flaps in hand and Wrist
- 1.7. Reconstruction of the Hand by Composite Free Flaps
 - 1.7.1. Neurocutaneous Flaps
 - 1.7.2. Osteocutaneous Flaps
 - 1.7.3. Toe-Hand





Structure and Content | 21 tech

- 1.8. Infections of the hand. Cellulitis, tenosynovitis, arthritis, osteomyelitis
 - 1.8.1. Cellulitis
 - 1.8.2. Tenosynovitis
 - 1.8.3. Arthritis and osteomyelitis
- 1.9. Burns
 - 1.9.1. The acute burned hand: initial treatment
 - 1.9.2. Initial surgery in the burned hand
 - .9.3. Secondary surgeries and sequelae
- 1.10. High Pressure Injections and Extravasation Lesions
 - 1.10.1. High pressure injections in the hand
 - 1.10.2. Extravasation injuries
 - 1.10.3. High pressure sequelae



A program that addresses, with unique didactic material, the reconstruction of complex hand wounds using pedicled and free flaps"





tech 24 | Methodology

At TECH we use the Case Method

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

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



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



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

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

- Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.





Relearning Methodology

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

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

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



Methodology | 27 tech

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

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

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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

tech 28 | Methodology

This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Surgical Techniques and Procedures on Video

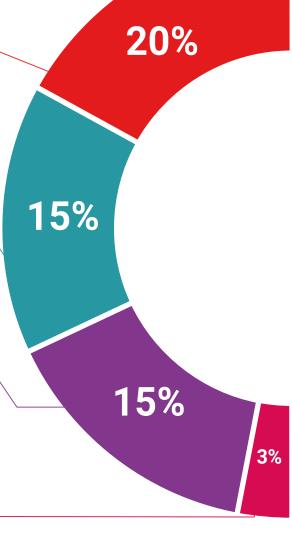
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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



Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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





Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

Expert-Led Case Studies and Case Analysis

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



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

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

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



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.









tech 32 | Certificate

This **Postgraduate Diploma in Surgery of Soft Parts of the Hand** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Certificate in Surgery of Soft Parts of the Hand Official N° of hours: 150 h.



^{*}Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

health information tutors information tutors deaching technology



Postgraduate Certificate

Surgery of Soft Parts of the Hand

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

