

Hybrid Professional Master's Degree Reconstructive Plastic Surgery





Hybrid Professional Master's Degree Reconstructive Plastic Surgery

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

Website: www.techtute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-reconstructive-plastic-surgery

Index

01

Introduction

p. 4

02

Why Study this Hybrid
Professional Master's Degree?

p. 8

03

Objectives

p. 12

04

Skills

p. 18

05

Course Management

p. 22

06

Educational Plan

p. 28

07

Clinical Internship

p. 42

08

Where Can I Do the Clinical
Internship?

p. 48

09

Methodology

p. 54

10

Certificate

p. 62

01

Introduction

The latest advances in techniques such as endoscopic surgery have allowed Reconstructive Plastic Surgery to offer increasingly precise and effective interventions. Thus, these improvements and the increased investment in research have favored its development, allowing specialists to apply procedures adapted to each specific case. Thanks to this exclusive TECH program, professionals will be able to update their knowledge in an area of great interest, keeping up to date with the main novelties and developing the skills with which to carry out surgeries that are a success for the patient. This qualification is also developed on a blended learning basis, providing students with the most advanced theory and intensive practice in a clinical center of recognized prestige.





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Technological advances are making reconstructive procedures more and more successful. With this program, you will integrate all these new tools into your daily work in a practical and participatory way”

Reconstructive operations are the origin of plastic surgery. The first interventions were carried out to recover parts of the body affected by accidents or caused by the human being itself. And, today, they are still the basis of this type of surgical interventions. Repairing abnormal body structures caused by congenital, developmental or growth irregularities, damage caused by trauma or accidents, infections or tumor diseases, which may include amputations or extensive ablations, may be some of the cases surgeons encounter in their practices.

In addition, it must be kept in mind that Reconstructive Plastic Surgery has a great prestige in society, due to its importance in recovering the well-being of patients. For this reason, it is a discipline of enormous relevance and its services are increasingly required, as access to this type of clinical interventions is becoming easier and easier.

Thus, in order to know the latest developments in this area, it is necessary to be updated through a high-level academic program. For this reason, TECH proposes the realization of this Hybrid Professional Master's Degree, in which students will find the most updated theoretical information of the moment, as well as a multitude of cases and simulated exercises that will be essential to strengthen the knowledge. For this, we have the best didactic methodology of the moment and a teaching team with extensive experience in the sector.

In addition, one of the main advantages of this program is that it offers a practical stay in a reference health center, dealing with real patients. In this way, the students will be able to spend an intensive period of 3 weeks, thanks to which they will be able to get up to date with the most innovative technology for reconstructive surgeries, as well as learn about the most current procedures. A learning that will be a great added value for your future as a plastic surgeon.

This **Hybrid Professional Master's Degree in Reconstructive Plastic Surgery** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Development of more than 100 clinical cases presented by professionals in Reconstructive Plastic Surgery
- Its graphic, schematic and eminently practical contents, with which they are conceived, gather scientific and assistance information on those medical disciplines that are essential for professional practice
- Comprehensive systematized action plans for the main of causes Reconstructive Plastic Surgery department
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Practical guidelines on the approach to cases related to Reconstructive Plastic Surgery
- Its special emphasis on evidence-based medicine and research methodologies for the performance of surgical interventions
- All of this will be complemented by 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
- In addition, you will be able to carry out a clinical internship in one of the best hospitals in the world



Thanks to your specialization in this field, you will be able to give back confidence to your patients by improving their physical appearance"

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Take an intensive 3-week stay in a prestigious center, where you can learn from the leading experts in the field”

In this Hybrid Professional Master's Degree, of professionalizing character and blended learning modality, the program is aimed at updating the knowledge of physicians in an area of great relevance such as Reconstructive Plastic Surgery.

The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in the research practice. Likewise, the theoretical-practical elements will facilitate the updating of knowledge and will allow effective decision making in environments of great responsibility.

In addition, its multimedia content, elaborated with the latest educational technology, will allow the physician a contextual and situated study, that is to say, a simulated environment that will provide an immersive learning programmed to train in real 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 students will be assisted by an innovative interactive video system created by renowned experts.

TECH brings together in a single program the best theoretical content on Reconstructive Plastic Surgery with the possibility of learning in a real clinic, through an internship period.

This program will provide you with a complete update in the new methods of reconstructive surgery.



02

Why Study this Hybrid Professional Master's Degree?

In order to reinforce all the theoretical knowledge obtained by the student and achieve a real advancement and development in the professional, TECH has created this Hybrid Professional Master's Degree. Especially useful for those who wish to specialize in the field of medicine, specifically in Reconstructive Plastic Surgery. Because you will check in situ everything learned during the study period 100% online, in the practical trainings determined for about 3 weeks of application in a renowned health institution.



Why Study this Hybrid Professional | 09
Master's Degree?

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This avant-garde program will allow you to update your skills in Reconstructive Plastic Surgery under the guidance of the most experienced specialists and with an internship in a prestigious clinical center”

1. Updating from the latest technology available

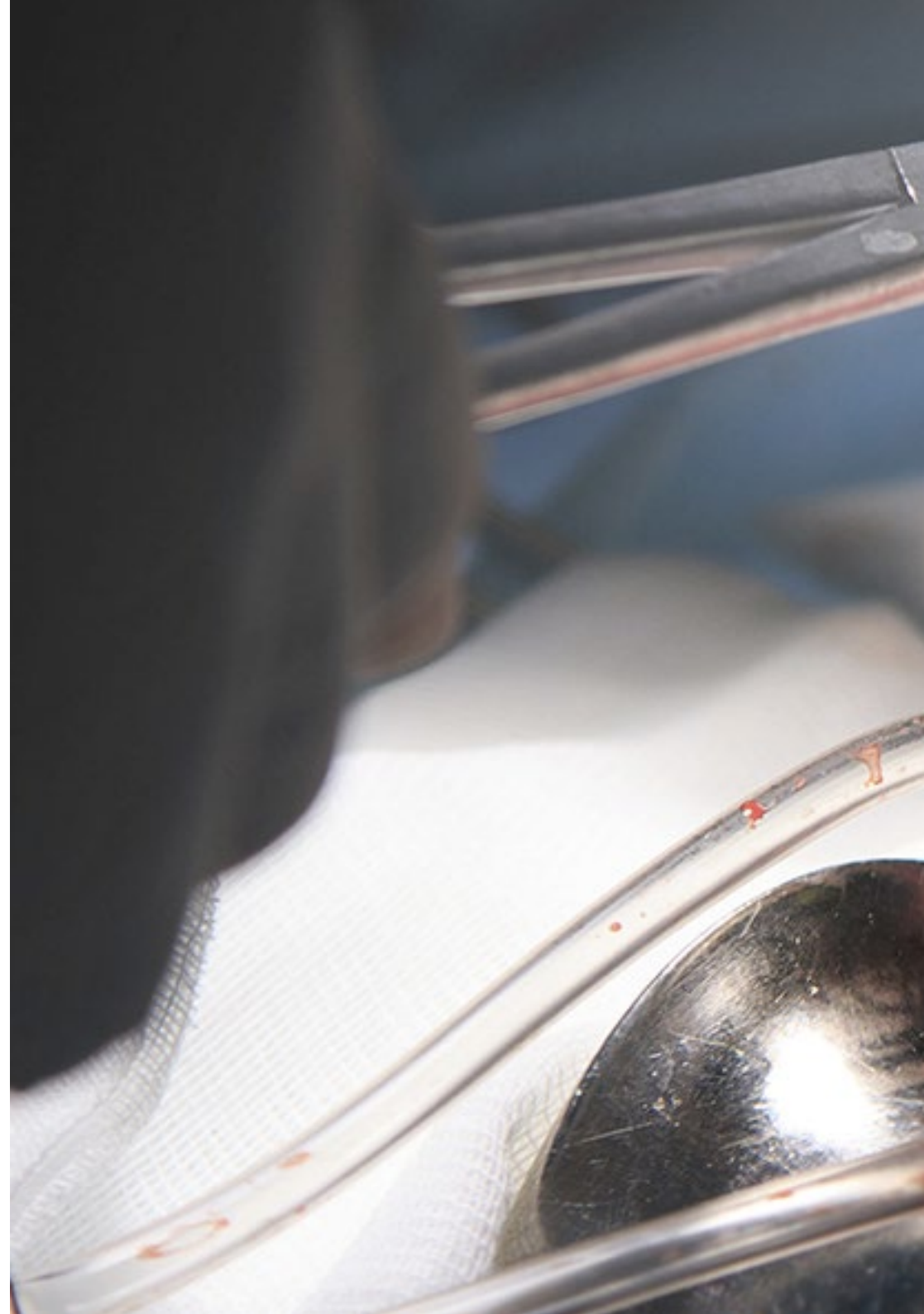
In order to preserve or recover the best possible functionality of the patient, surgical techniques must be used to transfer tissues from one part of the body to another, and sometimes creating a lost part with other different parts of the body, so it is essential to implement the best equipment, materials and tools to achieve the best results. In this sense, TECH has chosen a complete syllabus that condenses all the updated content on the subject, as well as the best hospital center for its students to see first hand the most advanced treatments in the area.

2. Gaining In-Depth Knowledge from the Experience of Top Specialists

The experience of the professionals who will accompany you in this theoretical-practical program will provide you with an unprecedented guarantee of updating. Your maximum teachings will be provided in the study material and throughout the process, even in the internship period, you will have an assigned tutor, who will be your guide in the observation of patients and real cases, which will allow you to add the most advanced practical knowledge to your academic experience in terms of Reconstructive Plastic Surgery.

3. Entering First-Class Clinical Environments

TECH has carefully selected all the centers available for its Practical Training. Thanks to this, the specialist will have guaranteed access to a prestigious clinical environment in the area of Reconstructive Plastic Surgery. Thus, they will be able to experience the day-to-day of a demanding, rigorous and exhaustive area of work, always applying the latest theses and scientific postulates in their work methodology.





4. Combining the Best Theory with State-of-the-Art Practice

With TECH the physicians will be able to find a methodology compatible with their daily work and will be able to implement what they have learned immediately. Thanks to this academic model, in only 12 months they will be able to be at the forefront of state-of-the-art procedures in the field of Reconstructive Plastic Surgery and, best of all, with the most revolutionary technology and specialized support.

5. Expanding the Boundaries of Knowledge

Thanks to all the knowledge contained in this program, the specialists will be able to expand their talent. In addition, TECH offers the possibility of completing the Practical Training in the main clinical centers of the world. In this way, the specialists will be able to experience a unique academic experience and catch up with the best professionals, who practice in first class hospitals and in different continents. A unique opportunity that only TECH offers you.



*You will have full practical immersion
at the center of your choice"*

03 Objectives

This Hybrid Professional Master's Degree has been designed with the main objective of offering physicians the best training of the moment in the field of Reconstructive Plastic Surgery. To this end, they are offered the opportunity to combine their theoretical study with clinical practice. This, without a doubt, will be fundamental to develop the necessary skills that will allow them to perform successful interventions, which will become true examples for the rest of the medical community.





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If your dream is to become a renowned plastic surgeon, you cannot miss the opportunity to take this Hybrid Professional Master's Degree. It is the perfect opportunity to specialize in reconstructive interventions”



General Objective

- This program has been designed to offer students a unique opportunity to improve their skills in an area of wide repercussion such as Reconstructive Plastic Surgery. Thus, the professional, at the end of this program, will have acquired the necessary skills to intervene in the physique of the patient who has a congenital malformation or who, after suffering an illness or an accident, has had their appearance modified and wishes to recover their image. To do this, you will be able to get up to date with the latest techniques and technological equipment in the sector, which will be essential to carry out safer and higher quality interventions



Thanks to this Hybrid Professional Master's Degree you will learn how to use the latest technologies to reconstruct different parts of the body"





Specific Objectives

Module 1. Reconstructive Plastic Surgery

- ♦ Examine the historical background of reconstructive surgery
- ♦ Analyze the evolution of reconstructive surgery
- ♦ Determine the characteristics of the skin and their relevance in reconstructive surgery
- ♦ Address the use of the most relevant techniques for reconstructive surgery
- ♦ Show the usefulness of microsurgery in reconstructive surgery
- ♦ Rationale for the use of flaps in reconstructive surgery
- ♦ Specify the usefulness of the use of grafts in reconstructive surgery
- ♦ Delve into the importance of understanding the psychological aspect of Reconstructive Plastic Surgery patients

Module 2. Facial Reconstruction

- ♦ Analyze possible solutions for eyebrow lesions
- ♦ Specify the surgical options for eyelid surgery
- ♦ Determine the correct steps in nasal reconstruction
- ♦ Examine the most advanced surgical techniques for pinna reconstruction
- ♦ Propose useful techniques in post-traumatic facial reconstruction
- ♦ Introduce the common causes of facial injuries and their surgical solution
- ♦ Identify common tumors conducive to facial reconstruction

Module 3. Facial Fracture Reconstruction

- ♦ Systematically and comprehensively examine the patient with facial fractures
- ♦ Define the etiology of facial fractures
- ♦ Provide accurate diagnoses in the facial trauma patient
- ♦ Assess appropriate alternatives for the resolution of various facial traumas
- ♦ Propose treatment plans according to the particular characteristics of each case
- ♦ Support the design of treatment plans based on the knowledge obtained
- ♦ Develop the ideal reconstructive surgical treatment in the facial trauma patient
- ♦ Identify the complications generated in the management of patients with facial trauma

Module 4. Chest Reconstruction

- ♦ Examine the characteristics of the most frequent congenital syndromes in thoracic reconstruction
- ♦ Compile the reconstructive theoretical bases applicable to thoracic reconstruction
- ♦ Analyze breast surgical anatomy for reconstruction of the thoracic region
- ♦ Identify the most frequent pathologies in reconstruction of the thoracic region
- ♦ Determine the primary steps for breast reconstruction
- ♦ Propose the use of muscle flaps for thoracic and breast reconstruction
- ♦ Establish the possible techniques for chest wall reconstruction

Module 5. Cleft Lip and Palate Reconstruction

- ♦ Examining the anatomical characteristics of patients with cleft lip and palate
- ♦ Define the etiological factors of cleft lip and palate
- ♦ Present the classification of cleft lip and palate
- ♦ Propose treatment plans according to the particular characteristics of each case
- ♦ Establish the advantages and disadvantages of the various surgical techniques for the correction of cleft lip and palate
- ♦ Support the design of treatment plans based on the knowledge obtained

Module 6. Abdominal Wall Reconstruction

- ♦ Develop criteria for the use of reconstructive techniques in the abdominal wall
- ♦ Demonstrate the use of synthetic material for abdominal wall reconstruction
- ♦ Establish steps for planning abdominal wall repair
- ♦ Propose useful techniques for the reconstruction of the abdominal wall
- ♦ Introduce the anatomical basis for the choice of abdominal flaps
- ♦ Specify the importance of the initial choice of the correct reconstructive technique
- ♦ Identify factors affecting the success of the reconstructive option

Module 7. Skin Reconstructive Treatments for Burns

- ♦ Review the most recent papers and publications
- ♦ Determine the most frequent benefits and/or complications of current techniques
- ♦ Examine the effectiveness of current techniques
- ♦ Propose aspects of improvement in the field of currently used aesthetic or reconstructive surgeries, including skin culture for grafting treatment
- ♦ Assessing the psychological impact of these surgical actions on the people undergoing surgery

Module 8. Limb Reconstruction

- ♦ Examine upper and lower limb regional anesthetic block techniques
- ♦ Analyze the new tendon sutures proposals
- ♦ Determine the types and techniques of flaps used in upper limb reconstruction
- ♦ Generate specialized knowledge on musculoskeletal reconstruction and neural repair in limb replantation
- ♦ Examine finger, upper and lower limb replantation techniques
- ♦ Develop the types and techniques used in the different types of bone grafts and osteoinductive materials

Module 9. Genital Reconstruction

- ♦ Review the most recent papers and publications
- ♦ Determine the most frequent benefits and/or complications of current techniques
- ♦ Examine the effectiveness of current techniques
- ♦ Propose new actions to improve the currently used aesthetic or reconstructive genital surgeries
- ♦ Assessing the psychological impact of these surgical actions on the people undergoing surgery

Module 10. Surgical Site Infections in Reconstructive Surgery

- ♦ Develop current aspects of microbiology applied to surgical site infections
- ♦ Analyze the pathophysiological aspects and classification of surgical site infections
- ♦ Identify risk factors and severity in surgical site infections
- ♦ Compile effective preoperative, operative and postoperative preventive measures
- ♦ Establishing antibiotic prophylaxis and its main aspects
- ♦ Generate strategies for pharmacological and surgical management of SSIs
- ♦ Examine the most frequent infections associated with the most commonly used materials in Reconstructive Surgery

04 Skills

Students who take this Hybrid Professional Master's Degree in Reconstructive Plastic Surgery will acquire the necessary skills to deal with different situations in clinical practice that require the recovery of the anatomical functionality of a person who has suffered an accident or has a birth malformation. For this purpose, they are offered a very complete theoretical and practical syllabus, as well as the possibility of an intensive stay in a reference center. The combination of both parts of the program will be essential to achieve the highest quality of learning.





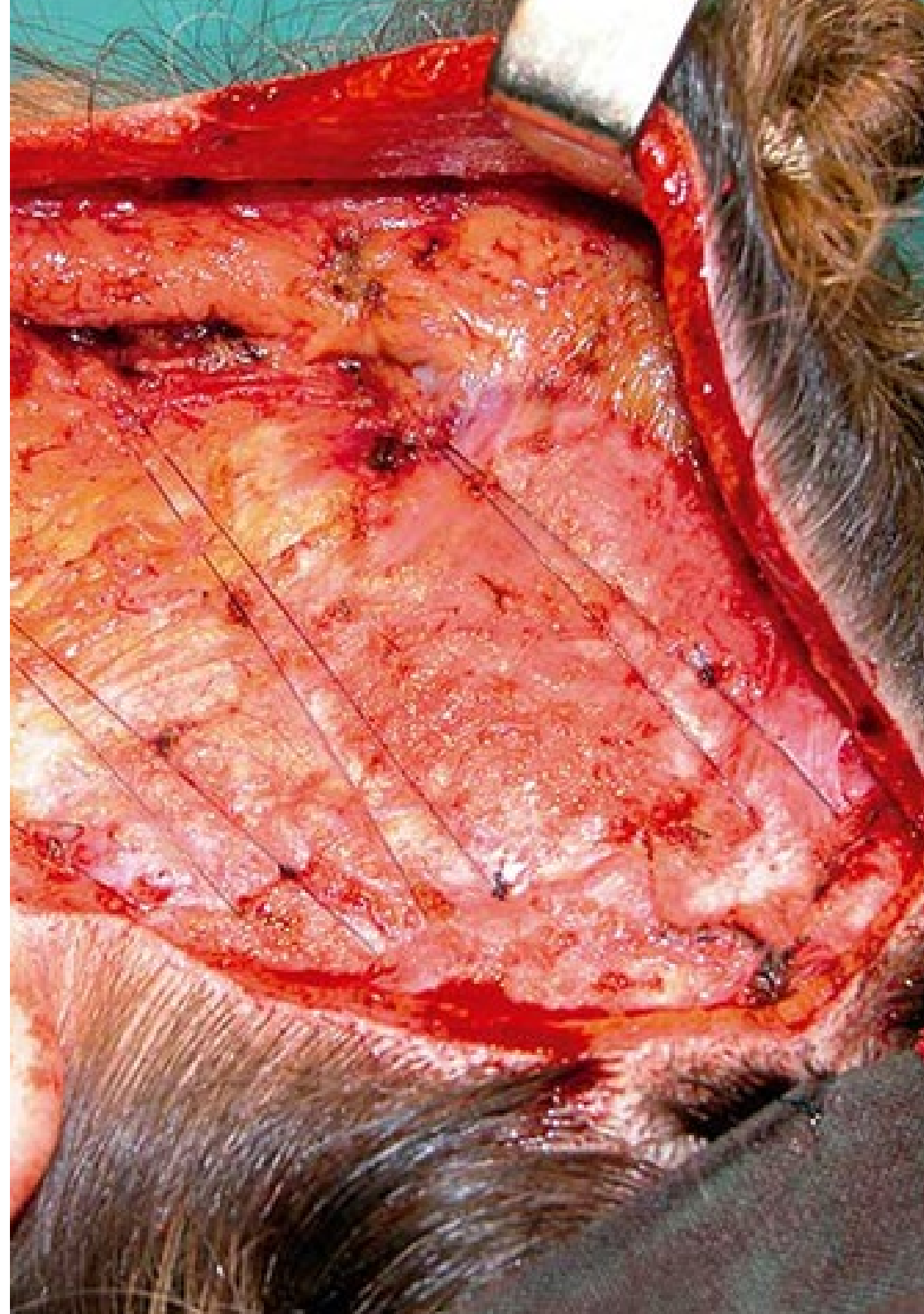
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Your work as a plastic surgeon will be essential to reconstruct the skin of patients who have suffered severe burns”



General Skills

- ♦ Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on social and ethical responsibilities related to Reconstructive Plastic Surgery
- ♦ Develop within the profession in terms of working with other health professionals, acquiring skills to work as a team
- ♦ Recognize the need to maintain your professional skills and keep them up to date, with special emphasis on autonomous and continuous learning of new information
- ♦ Develop the capacity for critical analysis and research in your professional field
- ♦ Solve multiple problems that arise in the practice of medical practice
- ♦ Develop specialized knowledge in facial, thoracic, abdominal, extremities and genital reconstruction, as well as in the prevention and management of possible infections in this type of surgeries





Specific Skills

- Know, from a historical perspective, the fundamental aspects of Reconstructive Surgery
- Learn how to apply the newest and most current techniques in the field of reconstructive plastic surgery
- Develop specialized knowledge for the correct decision making depending on the case presented
- Acquire specialized knowledge in diagnosis, design of treatment plans and the most appropriate surgical techniques for the resolution of the same
- Know in depth the surgical techniques and timing applied to thoracic surgery
- Understand the theoretical bases on the protocols of action and the different surgical techniques for facial reconstruction of patients with cleft lip and palate
- Know in depth the main pathologies that cause deterioration of the abdominal wall, as well as the main flaps for its repair
- Consolidate, update and expand knowledge in dermal reconstruction in burn patients
- Know how to approach limb reconstruction, focusing on local anesthetic techniques, tendon reconstruction, limb replantation and the use of bone flaps and grafts as treatment options
- Consolidate, update and expand knowledge of genital reconstruction
- Know how to deal with mutilations, congenital or acquired problems that can be treated surgically
- Know the current trends in the behavior of microorganisms, current preventive measures and the wide range of existing treatments that are continuously updated



Through this program you will be able to update your knowledge in relevant areas of reconstructive surgery, and you will be able to perform quality patient care, based on the latest scientific evidence"

05

Course Management

TECH only chooses the best professionals in each area for the development of their programs. For this reason, the specialist will find in this program a teaching staff with vast experience in reconstructive plastic surgery and a wide background in the academic field. This guarantees personalized attention of the highest level, from professionals committed to providing the specialist with the most updated knowledge in grafts for burn patients, thoracic reconstructions of various types and tendon suturing, among other techniques of great interest.





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The most outstanding professionals in the field of Reconstructive Plastic Surgery will provide you with the most relevant technological and scientific advances in this field”

International Guest Director

Peter Henderson, M.D. is a reconstructive surgeon and microsurgeon based in New York City who focuses on breast reconstruction and lymphedema treatment. He is Chief Executive Officer and Director of Surgical Services for Henderson Breast Reconstruction. In addition, he is an Associate Professor of Surgery (Plastic and Reconstructive Surgery) and Director of Research at the Icahn School of Medicine at Mount Sinai.

Dr. Henderson received a Bachelor of Fine Arts degree from Harvard University, a medical degree from Weill Cornell Medical College and an MBA from the Stern School of Business at New York University.

He completed his residencies in general surgery and plastic surgery at NewYork-Presbyterian/Weill Cornell. He then completed a fellowship in reconstructive microsurgery at Memorial Sloan Kettering Cancer Center. In addition, he was Chief of Research in the Laboratory of Bioregenerative Medicine and Surgery during his residency in general surgery.

Through a variety of surgical approaches and techniques, he is committed to helping patients restore, maintain or improve their function and appearance. Dr. Henderson's clinical care is supported by his research and scholarly activities in the field of microsurgery and breast reconstruction.



Dr. Henderson, Peter

- ◆ Director of Surgical Services at Henderson Breast Reconstruction
- ◆ Director of Research at Icahn School of Medicine at Mount Sinai
- ◆ Chief of Research, Laboratory of Bioregenerative Medicine and Surgery at Memorial Sloan Kettering Cancer Center
- ◆ M.D. from Weill Cornell Medical College
- ◆ Bachelor of Fine Arts from Harvard University
- ◆ Bush Award for Excellence in Vascular Biology

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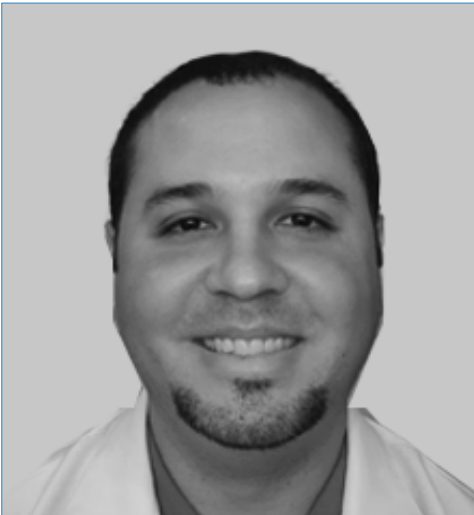
Thanks to TECH you will be able to learn with the best professionals in the world"

Management



Dr. Castro de Rojas, Ligia Irene

- ♦ Doctor specialized in Obstetrics and Gynecology
- ♦ Medical Specialist at the Central Hospital of Maracay
- ♦ Medical Specialist in Surgery and Ultrasound
- ♦ General Practitioner at Policlínica Coromoto
- ♦ Tenured Professor at the University of Carabobo



Dr. Piña Rojas, Juan Luis

- ♦ Plastic and Reconstructive Surgeon Specialist in Aesthetic and Maxillofacial Surgery
- ♦ Plastic and Reconstructive Surgeon of the Central Hospital of Maracay
- ♦ Specialist in Aesthetic and Maxillofacial Surgery
- ♦ Academic Teaching Coordinator of the Plastic Surgery Postgraduate Program of the Central Hospital of Maracay



Professors

Dr. Piña Aponte, Enzo Raúl

- ◆ Dentist Specialist in Oral and Maxillofacial Surgery
- ◆ Oral and Maxillofacial Surgeon in several private clinics in Venezuela
- ◆ Assistant Dentist of the Oral and Maxillofacial Surgery Service of the University Hospital Dr. Angel Larralde
- ◆ Professor of Oral and Maxillofacial Surgery at the Venezuelan Institute of Social Security

Dr. Rivas Zambrano, Aura Lorena

- ◆ Doctor Specialist in Pediatric Infectious Diseases
- ◆ Medical Specialist in Pediatric Infectology at the Central Hospital of Maracay
- ◆ Professor of Pediatric Infectious Diseases at the University of Carabobo
- ◆ Lecturer at national congresses and conferences

06

Educational Plan

This Hybrid Professional Master's Degree in Reconstructive Plastic Surgery has been planned with the academic needs of physicians in this field in mind. For this reason, the syllabus includes the most relevant cases they may face during their clinical practice, such as facial fractures, genital reconstruction or reconstruction of other limbs, as well as infections related to the intervention, among other important issues for the work of the plastic surgeon.





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You will find a content adapted to your highest demands, supported by a large number of real clinical cases, interactive summaries and working guides on Reconstructive Plastic Surgery”

Module 1. Reconstructive Plastic Surgery

- 1.1. History of reconstructive surgery
 - 1.1.1. Beginnings of reconstructive surgery
 - 1.1.2. Personalities of reconstructive surgery
 - 1.1.3. Historic Sites
- 1.2. Evolution of reconstructive surgery
 - 1.2.1. First World War
 - 1.2.2. Second World War
 - 1.2.3. Modern Age
- 1.3. Skin and Skin Irrigation
 - 1.3.1. Skin Anatomy
 - 1.3.2. Skin dermatomes
 - 1.3.3. Skin Irrigation
 - 1.3.4. Phases of Healing
- 1.4. Grafts
 - 1.4.1. Concepts
 - 1.4.1.1. Integration Phases
 - 1.4.2. Types
 - 1.4.2.1. Cutaneous
 - 1.4.2.2. Compounds
 - 1.4.3. Classification
 - 1.4.4. Uses
 - 1.4.5. Postoperative Care
- 1.5. Flaps
 - 1.5.1. Concepts
 - 1.5.2. Types
 - 1.5.2.1. Cutaneous
 - 1.5.2.2. Fasciocutaneous
 - 1.5.2.3. Muscular
 - 1.5.3. Classification
 - 1.5.4. Uses
 - 1.5.5. Postoperative Care
- 1.6. Microsurgery in Reconstructive Surgery
 - 1.6.1. Concepts
 - 1.6.2. Types
 - 1.6.2.1. Anastomosis Arterial
 - 1.6.2.2. Anastomosis Venosa
 - 1.6.2.3. Microsurgery of Lymphatic Vessels
 - 1.6.2.4. Peripheral Nerve Microsurgery
 - 1.6.3. Uses
 - 1.6.3.1. Free Flaps
 - 1.6.3.2. Reimplantation Surgeries
 - 1.6.4. Postoperative Care
- 1.7. Tissue Expanders
 - 1.7.1. Concepts
 - 1.7.2. Indications
 - 1.7.3. Applications
 - 1.7.4. Surgical Technique
 - 1.7.5. Postoperative Care
- 1.8. Psychological Aspects of the Reconstructive Patient
 - 1.8.1. Assessment
 - 1.8.2. Behaviour
- 1.9. Medical-legal Aspects of Reconstructive Surgery
 - 1.9.1. Legal Framework
 - 1.9.2. Informed Consent
 - 1.9.3. Importance of the Clinical History
- 1.10. Rehabilitation in Reconstructive Surgery
 - 1.10.1. Current Rehabilitation Techniques
 - 1.10.2. Use of Post-Surgical Bandages and Girdles
 - 1.10.3. Use of Ultrasound and Post-Surgical Drains

Module 2. Facial Reconstruction

- 2.1. Ciliary Region Reconstruction
 - 2.1.1. Surgical Anatomy
 - 2.1.2. Tumor Lesions
 - 2.1.2.1. Benign
 - 2.1.2.2. Malign
 - 2.1.3. Trauma Lesions
 - 2.1.4. Surgical Techniques
 - 2.1.4.1. Primary Synthesis
 - 2.1.4.2. Zeta Plastias
 - 2.1.4.3. Flaps
 - 2.1.4.4. Tattoos
- 2.2. Eyelid reconstruction
 - 2.2.1. Surgical Anatomy
 - 2.2.1.1. Upper Eyelid
 - 2.2.1.2. Lower Eyelid
 - 2.2.2. Tumor Lesions
 - 2.2.2.1. Benign
 - 2.2.2.2. Malign
 - 2.2.3. Trauma Lesions
 - 2.2.4. Ectropion and Entropion
 - 2.2.5. Surgical Techniques
 - 2.2.5.1. Upper Eyelid
 - 2.2.5.1.1. Primary Synthesis
 - 2.2.5.1.2. Flaps
 - 2.2.5.1.3. Grafts
 - 2.2.5.2. Lower Eyelid
 - 2.2.5.2.1. Primary Synthesis
 - 2.2.5.2.2. Flaps
 - 2.2.5.2.3. Grafts
- 2.3. Nasal reconstruction
 - 2.3.1. Surgical Anatomy
 - 2.3.2. Tumor Lesions
 - 2.3.2.1. Benign
 - 2.3.2.2. Malign
 - 2.3.3. Trauma Lesions
 - 2.3.4. Surgical Techniques
 - 2.3.4.1. Primary Synthesis
 - 2.3.4.2. Local Flaps
 - 2.3.4.3. Distance Flaps
 - 2.3.4.4. Grafts
- 2.4. Pinna Reconstruction
 - 2.4.1. Surgical Anatomy
 - 2.4.2. Tumor Lesions
 - 2.4.2.1. Benign
 - 2.4.2.2. Malign
 - 2.4.3. Trauma Lesions
 - 2.4.4. Congenital Anomalies
 - 2.4.4.1. Anotia
 - 2.4.4.2. Microtia
 - 2.4.4.3. Macrotia
 - 2.4.5. Surgical Techniques
 - 2.4.5.1. Primary Synthesis
 - 2.4.5.2. Local Flaps
 - 2.4.5.3. Distance Flaps
 - 2.4.5.4. Grafts
- 2.5. Upper lip reconstruction
 - 2.5.1. Surgical Anatomy
 - 2.5.2. Tumor Lesions
 - 2.5.2.1. Benign
 - 2.5.2.2. Malign

- 2.5.3. Trauma Lesions
- 2.5.4. Surgical Techniques
 - 2.5.4.1. Primary Synthesis
 - 2.5.4.2. Local Flaps
 - 2.5.4.3. Distance Flaps
 - 2.5.4.4. Grafts
- 2.6. Lower Lip Reconstruction
 - 2.6.1. Surgical Anatomy
 - 2.6.2. Tumor Lesions
 - 2.6.2.1. Benign
 - 2.6.2.2. Malign
 - 2.6.3. Trauma Lesions
 - 2.6.4. Surgical Techniques
 - 2.6.4.1. Primary Synthesis
 - 2.6.4.2. Local Flaps
 - 2.6.4.3. Distance Flaps
 - 2.6.4.4. Grafts
- 2.7. Facial Transplant
 - 2.7.1. History
 - 2.7.2. Technique
 - 2.7.3. Psychological Aspects
- 2.8. Use of Facial Prosthetic Material
 - 2.8.1. Indications
 - 2.8.2. Types
 - 2.8.3. Complications
- 2.9. Medical-legal Aspects of Reconstructive Surgery
 - 2.9.1. Legal Framework
 - 2.9.2. Informed Consent
 - 2.9.3. Importance of the Clinical History
- 2.10. Rehabilitation in Reconstructive Surgery
 - 2.10.1. Current Rehabilitation Techniques
 - 2.10.2. Use of Post-Surgical Bandages and Girdles
 - 2.10.3. Use of Ultrasound and Post-Surgical Drains

Module 3. Facial Fracture Reconstruction

- 3.1. Initial Assessment of the Maxillofacial Trauma Patient
 - 3.1.1. ABCDE in the Polytraumatized Patient
 - 3.1.2. Clinical Examination
 - 3.1.2.1. Facial Upper Third
 - 3.1.2.2. Midface
 - 3.1.2.3. Lower Third of the Face
 - 3.1.3. Imaging Examination
- 3.2. Mandibular Fractures
 - 3.2.1. Epidemiology and Etiology
 - 3.2.2. Classification of Mandibular Fractures
 - 3.2.3. Diagnosis of Mandibular Fractures
 - 3.2.3.1. Clinical Assessment
 - 3.2.3.2. Imaging Assessment
 - 3.2.4. General Treatment Principles
 - 3.2.4.1. Closed Handling Indications
 - 3.2.4.2. Open Handling Indications
 - 3.2.5. Mandibular Fracture Treatment
 - 3.2.5.1. Closed Handling Techniques
 - 3.2.5.2. Open Handling Techniques
 - 3.2.6. Complications
- 3.3. Condylar Fractures
 - 3.3.1. Etiology
 - 3.3.2. Mandibular Fracture Classification
 - 3.3.3. Mandibular Fracture Diagnosis
 - 3.3.3.1. Clinical Assessment
 - 3.3.3.2. Imaging Assessment
 - 3.3.4. General Treatment Principles
 - 3.3.4.1. Closed Handling Indications
 - 3.3.4.2. Open Handling Indications
 - 3.3.5. Mandibular Fracture Treatment
 - 3.3.5.1. Closed Handling Techniques
 - 3.3.5.2. Open Handling Techniques
 - 3.3.6. Complications

- 3.4. Maxillary Fractures
 - 3.4.1. Etiology
 - 3.4.2. Maxillary Fracture Classification
 - 3.4.3. Mandibular Fracture Diagnosis
 - 3.4.3.1. Clinical Assessment
 - 3.4.3.2. Imaging Assessment
 - 3.4.4. Anatomy of Treatment Considerations
 - 3.4.5. Mandibular Fracture Treatment
 - 3.4.5.1. Closed Handling Techniques
 - 3.4.5.2. Open Handling Techniques
 - 3.4.6. Palatal Fractures
 - 3.4.6.1. Palatine Fracture Classification
 - 3.4.6.2. Palatine Fracture Treatment
 - 3.4.7. Complications
- 3.5. Nasal Fractures
 - 3.5.1. Etiology
 - 3.5.2. Nasal Fracture Classification
 - 3.5.3. Nasal Fracture Diagnosis
 - 3.5.3.1. Clinical Assessment
 - 3.5.3.2. Imaging Assessment
 - 3.5.4. Nasal Fractures Treatment
 - 3.5.4.1. Closed Handling
 - 3.5.4.2. Open Management
 - 3.5.5. Complications
- 3.6. Fractures of the Naso-Orbito-Ethmoid Complex (NOE)
 - 3.6.1. Etiology
 - 3.6.2. NOE Fracture Classification
 - 3.6.3. NOE Fractures Diagnosis
 - 3.6.3.1. Clinical Assessment
 - 3.6.3.2. Imaging Assessment
 - 3.6.4. NOE Fracture Treatment
 - 3.6.5.1. Closed Handling Techniques
 - 3.6.5.2. Open Handling Techniques
 - 3.6.5. Orbital Wall Fractures
 - 3.6.6.1. Orbital Wall Fracture Classification
 - 3.6.6.2. Orbital Wall Fracture Diagnosis
 - 3.6.6.3. Orbital Wall Fracture Treatment
 - 3.6.6. Complications
- 3.7. Orbitozygomatic Fractures
 - 3.7.1. Etiology
 - 3.7.2. NOE Fracture Classification
 - 3.7.3. NOE Fractures Diagnosis
 - 3.7.3.1. Clinical Assessment
 - 3.7.3.2. Imaging Assessment
 - 3.7.4. General Treatment Principles
 - 3.7.5. Treatment of Orbitozygomatic Fractures
 - 3.7.5.1. Closed Handling Techniques
 - 3.7.5.2. Open Handling Techniques
 - 3.7.6. Complications
- 3.8. Zygomatic Arch Fractures
 - 3.8.1. Arch Fracture Classification
 - 3.8.2. Arch Fracture Diagnosis
 - 3.8.3. Arch Fracture Treatment
 - 3.8.4. Complications
- 3.9. Frontal Fractures
 - 3.9.1. Epidemiology
 - 3.9.2. NOE Fracture Classification
 - 3.9.3. NOE Fracture Diagnosis
 - 3.9.3.1. Clinical Assessment
 - 3.9.3.2. Imaging Assessment
 - 3.9.4. Anatomic Considerations
 - 3.9.5. General Treatment Principles
 - 3.9.6. NOE Fracture Treatment
 - 3.9.7. Complications

- 3.10. Panfacial Fractures
 - 3.10.1. Initial Assessment
 - 3.10.2. General Treatment Principles
 - 3.10.3. Anatomic Considerations
 - 3.10.4. Treatment Sequence
 - 3.10.5. Complications

Module 4. Chest Reconstruction

- 4.1. Thoracic Surgical Anatomy
 - 4.1.1. Bones
 - 4.1.2. Cartilage
 - 4.1.3. Muscle
 - 4.1.4. Organs
- 4.2. Thoracic Congenital Syndromes
 - 4.2.1. Poland
 - 4.2.2. Jeune
 - 4.2.3. Spondylothoracic Displasia
- 4.3. Thoracic Malformations
 - 4.3.1. Pectumexcavatum
 - 4.3.2. Pectumcarinatum
 - 4.3.3. Sternals
 - 4.3.4. Sacks
- 4.4. Breast Reconstruction
 - 4.4.1. Breast Surgical Anatomy
 - 4.4.2. Breast Cancer
 - 4.4.3. Oncologic Reconstruction
 - 4.4.3.1. Partial
 - 4.4.3.2. Total
 - 4.4.4. Reconstruction With Prosthetic Material
 - 4.4.4.1. Breast Implant
 - 4.4.4.2. Tissue Expanders
 - 4.4.4.3. Mesh
- 4.5. Thoracic Reconstruction with Latissimus Dorsi Flap
 - 4.5.1. Surgical Anatomy
 - 4.5.2. Surgical Technique
 - 4.5.3. Uses
 - 4.5.4. Complications
- 4.6. Thoracic Reconstruction with Transverse Rectus Abdominis Muscle Flap TRAM
 - 4.6.1. Surgical Anatomy
 - 4.6.2. Surgical Technique
 - 4.6.3. Uses
 - 4.6.4. Complications
- 4.7. Nipple Areola Complex Reconstruction
 - 4.7.1. Surgical Anatomy
 - 4.7.2. Surgical Techniques
 - 4.7.3. Complications
- 4.8. Thoracic Reconstruction with Free Flaps
 - 4.8.1. Indications
 - 4.8.2. Contraindications
 - 4.8.3. Techniques
- 4.9. Thoracic Reconstruction with Latissimus Dorsi Flap
 - 4.9.1. Surgical Anatomy
 - 4.9.2. Surgical Technique
 - 4.9.3. Uses
 - 4.9.4. Complications
- 4.10. Rehabilitation in Chest Reconstructive Surgery
 - 4.10.1. Respiratory Therapy
 - 4.10.2. Use of Girdles And Bandages
 - 4.10.3. Lymphatic Drainage
 - 4.10.4. Use of Ultrasound

Module 5. Cleft Lip and Palate Reconstruction

- 5.1. Labiopalatal Clefts
 - 5.1.1. Embryology
 - 5.1.2. Morphological
 - 5.1.2.1. Cleft Lip Anatomy
 - 5.1.2.2. Cleft Palate Anatomy
 - 5.1.3. Epidemiology
 - 5.1.4. Etiopathogenesis
- 5.2. Nomenclature and Classification of Cleft Lips and Palate
 - 5.2.1. Clinical Importance of Classifications
 - 5.2.2. Embryological Classifications
 - 5.2.3. Anatomical Classifications
- 5.3. Non-Surgical Multidisciplinary Management of the Patient with Cleft Lip and Palate
 - 5.3.1. Historical Evolution
 - 5.3.2. Psychosocial Aspects
 - 5.3.2.1. Parent Management
 - 5.3.3. Multidisciplinary Assessment
 - 5.3.3.1. Healthy Child Check-up
 - 5.3.3.2. Assessment by Subspecialties
- 5.4. Surgical Management of Unilateral Labial Clefts
 - 5.4.1. Anesthetic Considerations
 - 5.4.2. Anatomic Considerations
 - 5.4.3. Chronological Sequence of Treatment
 - 5.4.4. Surgical Techniques for Unilateral Cleft Cheiloplasty
- 5.5. Surgical Management of Bilateral Lip Clefts
 - 5.5.1. Anatomic Considerations
 - 5.5.2. Chronological Sequence of Treatment
 - 5.5.3. Surgical Techniques for Bilateral Cleft Cheiloplasty
- 5.6. Surgical Management of Palatal Clefts
 - 5.6.1. Anesthetic Considerations
 - 5.6.2. Anatomic Considerations
 - 5.6.3. Chronological Sequence of Treatment
 - 5.6.4. Palatoplasty
 - 5.6.5. Vomerian flap
 - 5.6.6. Pharyngeal Flap
- 5.7. Surgical Management of Alveolar Clefts
 - 5.7.1. Surgical Objectives
 - 5.7.2. Orthodontic-Surgical Sequence
 - 5.7.2.1. Orthopedic and Orthodontic Considerations
 - 5.7.3. Types of Grafts
 - 5.7.3.1. Autogenous Grafts
 - 5.7.3.2. Allogenic grafts
 - 5.7.3.3. Implants
 - 5.7.4. Surgical Techniques
 - 5.7.5. Post-Operative Care
 - 5.7.6. Complications
- 5.8. Surgical Management of Sequelae
 - 5.8.1. Alveolar Fissures and Alveolar Fistulas
 - 5.8.2. Lip Deformities
 - 5.8.3. Nasal Deformities
 - 5.8.4. Palatal Fistulas
 - 5.8.5. Velopharyngeal Incompetence and Insufficiency
- 5.9. Chronological Sequence of Treatment
 - 5.9.1. Pre-surgery Preparation
 - 5.9.2. Cheiloplasty
 - 5.9.3. Palatoplasty
 - 5.9.4. Alveoloplasty
 - 5.9.5. Orthognathic Surgery
 - 5.9.6. Implant Surgery
 - 5.9.7. Rhinoplasty and Related Aesthetic Corrections
- 5.10. Legal Aspects
 - 5.10.1. Legal Framework
 - 5.10.2. Informed Consent
 - 5.10.3. Importance of the Clinical History

Module 6. Abdominal Wall Reconstruction

- 6.1. Abdominal Cavity Physiology
 - 6.1.1. Concepts
 - 6.1.2. Theoretical Basis
 - 6.1.3. Update
- 6.2. Surgical Anatomy of the Abdominal Wall
 - 6.2.1. Musculature
 - 6.2.2. Irrigation
 - 6.2.3. Innervation
- 6.3. Abdominal Wall Defects
 - 6.3.1. Congenital
 - 6.3.2. Acquired
- 6.4. Abdominal Wall Pathology
 - 6.4.1. Traumatic
 - 6.4.2. Tumorous
- 6.5. Use of Synthetic Material for Abdominal Wall Reconstruction
 - 6.5.1. Types
 - 6.5.2. Indications
 - 6.5.3. Complications
- 6.6. Rectus Abdominal Wall Reconstruction with Rectus Abdominal Flap
 - 6.6.1. Surgical Anatomy
 - 6.6.2. Surgical Technique
 - 6.6.3. Uses
- 6.7. Rectus Abdominal Wall Reconstruction with Rectus Abdominal Flap
 - 6.7.1. Surgical Anatomy
 - 6.7.2. Surgical Technique
 - 6.7.3. Uses
- 6.8. Rectus Abdominal Wall Reconstruction with Rectus Abdominal Flap
 - 6.8.1. Broad Back
 - 6.8.2. Tensor Fascia Lata

- 6.9. Rehabilitation in Abdomen Reconstructive Surgery
 - 6.9.1. Use of Girdles And Bandages
 - 6.9.2. Lymphatic Drainage
 - 6.9.3. Use of Ultrasound
- 6.10. Dermolipectomies as an Associated Procedure in Abdominal Wall Reconstruction
 - 6.10.1. Types
 - 6.10.2. Clinical Cases
 - 6.10.3. Surgical Options

Module 7. Skin Reconstructive Treatments for Burns

- 7.1. Burn patient
 - 7.1.1. General and Surgical Treatment
 - 7.1.2. Hydration, Monitoring of Renal and Tissue Perfusion
 - 7.1.3. Protection Against Infections
- 7.2. Grafts
 - 7.2.1. Graft Reconstruction Indications
 - 7.2.2. in vitro Skin Culture
 - 7.2.3. Operative Technique
- 7.3. Heat Burns
 - 7.3.1. Burn Types, Regions
 - 7.3.2. Treatment and Considerations Prior to Reconstruction
 - 7.3.3. Use of Grafts and Flaps in Pathological Scars
- 7.4. Electrical Burns
 - 7.4.1. Burn Type, Systemic Impact
 - 7.4.2. Consequence and Outlook
 - 7.4.3. Current Restorative Surgery
- 7.5. Radiation Burn
 - 7.5.1. Types and Consequences of Radiation
 - 7.5.2. General Treatment
 - 7.5.3. Current Reconstructive Techniques

- 7.6. Face and Neck Burns
 - 7.6.1. Preliminary Behavior and Treatment
 - 7.6.2. Reconstructive and Cosmetic Surgeries
 - 7.6.3. Current Reconstruction and Treatment Techniques
- 7.7. Upper Limb Burns
 - 7.7.1. Reconstructive Arm and Forearm Surgery
 - 7.7.2. Hand Reconstructive Surgery
 - 7.7.3. Update in Hand Treatment and Surgery
- 7.8. Lower Limb Burns
 - 7.8.1. Reconstructive Leg and Thigh Surgery
 - 7.8.2. Reconstructive Surgery of the Foot
 - 7.8.3. New Trends in Reconstructive Surgery
- 7.9. Genital Burns
 - 7.9.1. Treatment and Reconstruction of External Genitalia
 - 7.9.2. Implants and Grafts in the Female Genital Area
 - 7.9.3. Implants and Grafts in the Male Genital Area
- 7.10. Generalities about the Legal Implications of Genital Reconstructive Surgery
 - 7.10.1. Importance of Taking a Complete and Thorough Medical History
 - 7.10.2. Importance of the Psychological Examination of the Patient
 - 7.10.3. Informed Consent. Legal Involvement
 - 7.10.4. Liability Insurance

Module 8. Limb Reconstruction

- 8.1. Truncal Anesthesia
 - 8.1.1. Upper Limb Regional Anesthesia
 - 8.1.1.1. Tightness Above the Elbow
 - 8.1.1.2. Tightness Below the Elbow
 - 8.1.2. Lower Limb Regional Anesthesia
 - 8.1.2.1. Lumbar Square Tightness
 - 8.1.2.1.1. Anterior Lumbar Plexus Branch Blockade
 - 8.1.2.2. Psoas Compartment Blockades
 - 8.1.3. Complications

- 8.2. Tendon Suturing Techniques
 - 8.2.1. New Proposals
 - 8.2.1.1. Without Grip, with Grip and Lock
 - 8.2.1.2. Internal vs. External
 - 8.2.1.3. Peripheral Circumferential
 - 8.2.2. Tendon Retabulation
 - 8.2.3. Tendon Shortening
- 8.3. Upper Limb Flap
 - 8.3.1. Hand Soft Tissue Reconstruction
 - 8.3.1.1. Local and Regional Flaps
 - 8.3.1.1.1. Radial Antebrachial
 - 8.3.1.1.2. Posterior Arterial Interosseous
 - 8.3.2. Forearm, Arm and Elbow Soft Tissue Reconstruction
 - 8.3.2.1. Local and Regional Flaps
 - 8.3.2.1.1. Side of the Arm
 - 8.3.2.1.2. Latissimusdorsi
- 8.4. Upper Limb Free Flap
 - 8.4.1. Forearm Radial
 - 8.4.2. Inguinal
 - 8.4.3. Superficial Inferior Epigastric Artery
 - 8.4.4. Scapula
 - 8.4.5. Anterolateral Thigh
 - 8.4.6. Side of the Arm
- 8.5. Lower Limb Flap
 - 8.5.1. Cutaneous Muscle Flap
 - 8.5.2. Bipedicled Fasciocutaneous Flap
 - 8.5.3. Gastrocnemius Muscle
 - 8.5.4. Soleus Muscle
 - 8.5.5. Reverse Sural Artery
 - 8.5.5.1. Posterior Tibial Artery Perforator
 - 8.5.5.2. From Calcaneal Lateral Artery
 - 8.5.5.3. From the Medial Plantar Artery
 - 8.5.5.4. Dorsum of the Foot

- 8.6. Lower Limb Free Flap
 - 8.6.1. Rectusabdominus
 - 8.6.2. Musculus gracilis
 - 8.6.3. Latissimusdorsi
 - 8.6.4. Anterolateral Thigh
 - 8.6.5. Radial Forearm
 - 8.6.6. Risk Factors Associated with Rejection
- 8.7. Replantation of Limbs I
 - 8.7.1. Musculoskeletal Reconstruction of Replantation Limbs
 - 8.7.2. Neural Reconstruction and Recovery in Limb Replantation
 - 8.7.3. Management of Complications After Limb Replantation
 - 8.7.4. Replantation in Children and Teenagers
- 8.8. Limb Replantation II
 - 8.8.1. Thumb Replantation
 - 8.8.2. Finger Replantation
 - 8.8.3. Radiocarpal Joint Replantation
 - 8.8.4. Arm and Forearm Replantation
 - 8.8.5. Lower Limb Replantation
- 8.9. Bone Graft
 - 8.9.1. Autografts
 - 8.9.1.1. Vascularized
 - 8.9.1.2. Non-Vascularized
 - 8.9.2. Allografts
 - 8.9.3. Xenografts
 - 8.9.4. Osteoinductive Materials
- 8.10. Post-surgical Rehabilitation of Reconstructive Limb Surgery
 - 8.10.1. Physiotherapy and Hydrotherapy
 - 8.10.2. Use of Lymphatic Drainage and Ultrasound
 - 8.10.3. Hyperbaric Chamber Therapy

Module 9. Genital Reconstruction

- 9.1. Female Genital System Anatomy and Physiology
 - 9.1.1. Female Genital System Abnormalities
 - 9.1.2. Congenital Anomalies: Vaginal Atresia, Nymphal Atresia
 - 9.1.3. Acquired Anomalies, Post-Oncological Treatment, Post-Traumatic Surgery
 - 9.1.4. Pelvic Floor
- 9.2. Vaginoplasties
 - 9.2.1. Post-Radiation Reconstructive Vaginoplasties
 - 9.2.2. Post-Trauma Reconstructive Vaginoplasties
 - 9.2.3. Use of Grafts and Flaps in Vaginoplasties
 - 9.2.4. Vaginal Prosthesis Use
 - 9.2.5. Vaginal Dilators Post-Surgery
- 9.3. Cures and Reconstruction in Vaginal Prolapses
 - 9.3.1. Anterior Prolapse
 - 9.3.2. Posterior Prolapse
 - 9.3.3. Urethral Pathologies
- 9.4. Labiaplasty
 - 9.4.1. Labia Majora Labiaplasty
 - 9.4.2. Nymphectomies
 - 9.4.3. Radiofrequency Surgery and CO2 Laser
- 9.5. Hymenoplasty
 - 9.5.1. Post Intentional Hymenectomy
 - 9.5.2. Post Intentional Hymenectomy
 - 9.5.3. Hymeneal Reconstruction
- 9.6. Genital Mutilation, Clitoridectomy and Infibulation
 - 9.6.1. Clitoral Reconstruction
 - 9.6.2. Labia Majora and Nymphatic Reconstruction
 - 9.6.3. Clitoroplasty
 - 9.6.4. Reconstructive Surgery in Gender Reassignment

- 9.7. Male Genital system
 - 9.7.1. Congenital and Acquired Abnormalities
 - 9.7.2. Phimosis, Circumcision, Aesthetic Penile Surgeries
 - 9.7.3. Short Frenulum
- 9.8. Testicular Implant
 - 9.8.1. Types of Prosthesis
 - 9.8.2. Operative Technique
- 9.9. Aesthetic or Reconstructive Surgery of the Scrotum
 - 9.9.1. Indications for Scrotal Reconstruction
 - 9.9.2. Operative Technique
- 9.10. Legal Implications of Genital Reconstructive Surgery
 - 9.10.1. Importance of Taking a Complete and Thorough Medical History
 - 9.10.2. Importance of the Psychological Examination of the Patient
 - 9.10.3. Informed Consent. Legal Involvement
 - 9.10.4. Liability Insurance

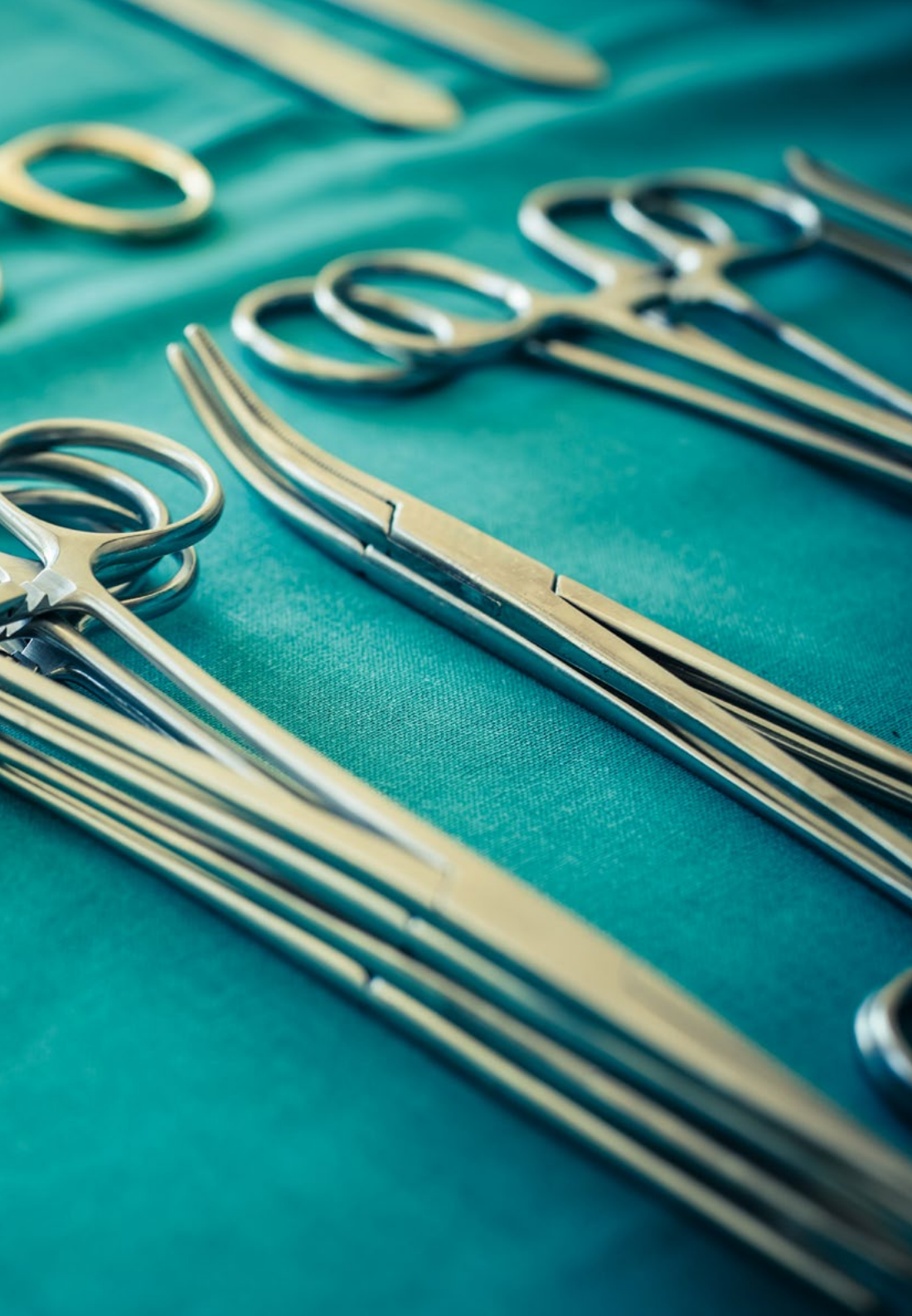
Module 10. Surgical Site Infections in Reconstructive Surgery

- 10.1. Applied Microbiology
 - 10.1.1. Microorganisms of the Host's Normal Flora
 - 10.1.2. Differences between Colonization and Infection
 - 10.1.2.1. Pathogenesis of Microorganisms Involved in Infection
 - 10.1.2.2. Biofilm Paper
 - 10.1.3. Identification of the Causal Microorganism
 - 10.1.3.1. Sample Collection and Transfer
 - 10.1.3.2. Identification of Typical and Atypical Microorganisms
 - 10.1.3.3. Assessment of Antibigram and Resistance Patterns
- 10.2. Inflammatory and Immune Response Factors in the Surgical Patient
 - 10.2.1. Updating of Concepts
 - 10.2.1.1. Cellular Mechanisms of the Inflammatory Response
 - 10.2.1.2. Adequacy and Dysregulation of the Immune-Inflammatory Response
 - 10.2.2. Utility of the Inflammatory Response in the Assessment of the Surgical Patient
 - 10.2.3. Main Parameters of the Inflammatory Response
 - 10.2.3.1. Biomarkers in Clinical Practice

- 10.3. Surgical Site Infection
 - 10.3.1. Updated Definitions and Classifications
 - 10.3.1.1. Surveillance of ISQ and Risk Indexes
 - 10.3.2. Risk Factors
 - 10.3.2.1. Endogenous or Non-Modifiable
 - 10.3.2.2. Exogenous or Modifiable
 - 10.3.3. Severity Classification of SSI
 - 10.3.3.1. Asepsia Score
- 10.4. Effectiveness of Preoperative Surgical Site Infection Prevention Measures
 - 10.4.1. Hand Hygiene
 - 10.4.2. Decontamination
 - 10.4.3. dressing, handling and movement in the surgical area
- 10.5. Effectiveness of Intraoperative Measures for Surgical Site Prevention
 - 10.5.1. Non-Parenteral Antimicrobial Prophylaxis
 - 10.5.2. Appropriate Control and Accepted Glycemia Limits
 - 10.5.3. Body Temperature Optimization
 - 10.5.4. Oxygenation
 - 10.5.5. Antiseptic Prophylaxis
 - 10.5.6. Prosthetic Arthroplasty
 - 10.5.2.6.1. Risk vs. benefits of blood transfusions
 - 10.5.2.6.2. Intra-Articular Corticosteroid
 - 10.5.2.6.3. Anticoagulation
 - 10.5.2.6.4. Anti-Biofilm Measures
- 10.6. Postoperative Measures to Prevent Infection
 - 10.6.1. Wound Care
 - 10.6.2. Antimicrobial Dressings
 - 10.6.3. Surgical Cleaning of Infected Surgical Sites
- 10.7. Antibiotic Prophylaxis
 - 10.7.1. Trends in Microbiology
 - 10.7.1.1. Colonization and Resistance

- 10.7.2. Allergy to Beta-Lactams
- 10.7.3. Administration Updates
 - 10.7.3.1. Start time
 - 10.7.3.2. Dosage
 - 10.7.3.3. Duration
 - 10.7.3.4. Redosification
- 10.8. Antimicrobial Treatment and Control of Focus in the Surgical Patient
 - 10.8.1. Treatment Duration
 - 10.8.2. Empirical Regimen According to Surgical Site and Type of Infection
 - 10.8.2.1. Large-positive spectrum, types of antimicrobial agents
 - 10.8.2.2. Large negative spectrum of antimicrobial types
 - 10.8.3. Surgical Control of the Focus
 - 10.8.3.1. Relevance of Percutaneous and Endoscopic Management
 - 10.8.3.2. Surgical Focus Control Maneuvers
- 10.9. Surgical Site Infection According to Procedures
 - 10.9.1. Face and Neck Surgeries
 - 10.9.2. Breast Surgeries
 - 10.9.3. Skin and Integument Surgeries
 - 10.9.4. Limb Arthroplasties
- 10.10. Surgical Site Infection Based on Prosthetic Biomaterials
 - 10.10.1. Metals
 - 10.10.2. Ceramics
 - 10.10.3. Polymers





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This program contains the most complete and updated syllabus on reconstructive treatments, which will allow you to improve your daily clinical practice”

07

Clinical Internship

The possibility of doing an internship in a prestigious clinical center is a unique opportunity for doctors who need to update their knowledge and get up to date with the latest technologies. With this in mind, TECH offers this Hybrid Professional Master's Degree, which has a theoretical program, but also includes an intensive stay in a reference clinic. In this way, it will be possible to know the real work of plastic surgeons.





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You will be able to participate in the day-to-day work of a clinic, developing the necessary skills to become an expert in Reconstructive Plastic Surgery”

The internship period of this program in Reconstructive Plastic Surgery consists of an intensive stay in a reference center, lasting 3 weeks from Monday to Friday, with 8 consecutive hours of practical learning with an assistant specialist. This stay will allow students to see real patients alongside a team of reference professionals in this area, applying the latest technologies and techniques in this field.

In this training proposal, of a completely practical nature, the activities are aimed at developing and perfecting the skills necessary for the care of patients requesting physical improvement, either due to an abnormal body structure, or due to an accident or illness that has caused them physical damage, and in conditions that require a high level of qualification. In this way, this proposal is oriented to the specific training for the exercise of the activity, in a safe environment for the patient and with a high professional performance.

It is, without a doubt, a unique opportunity to learn by working in an innovative center, which is committed to the quality of its resources and the latest technologies. Thus, the objectives of the patient and the professionals are met in a safe way and following the highest quality standards currently required.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of knowledge (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork, and multidisciplinary integration as transversal competencies for the practice of Medicine and Reconstructive Plastic Surgery (learning to be and learning to relate).



The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

Module	Practical Activity
Facial Reconstructive Plastic Surgery Techniques	Reconstruct the ciliary region affected by tumor lesions, applying Z-plasties and flaps
	Approach reconstructive surgery of the upper and lower eyelid using flaps and grafts
	Perform upper and lower lip reconstructive surgery using local or distant flaps and grafts
	Perform nasal reconstructive surgery, using a local coverage flap or pedicled flaps in those cases that require it
	Indicate and apply vulcanized silicone or osseointegrated facial prostheses
	Treat mandibular, condylar, maxillary and nasal fractures, performing open or closed management according to the specificities of the lesion and the patient
	Design proposals to reconstruct eyebrows, eyelids, pinnae and labiopalatine clefts affected by trauma or a syndrome
Thoracic, abdominal and limb reconstruction techniques	Perform partial or total oncological breast reconstruction, applying breast implants, tissue expanders and/or meshes
	Apply the use of muscle flaps for thoracic and breast reconstruction
	Establish a rehabilitation plan after thoracic or abdominal reconstructive surgery using respiratory therapy, compression garments and bandages, lymphatic drainage and ultrasound
	Perform surgical reconstruction of the abdominal wall with rectus abdominis flap, fascia lata tensor flap or free flaps
	Apply truncal anesthesia in reconstructive surgeries of limbs, establishing blocks in the precise areas according to the region to be operated on
	Use the tendon suture technique, performing tendon retabulation or tendon shortening
	Apply the flap and the free flap of upper and lower limbs

Module	Practical Activity
Skin Reconstructive Treatments for Burns	Perform a study of the characteristics of the patient's skin as an essential part of the satisfactory results in reconstructive surgery
	Apply grafts in the burn patient, performing in vitro skin culture
	Use grafts and flaps in pathological scars in heat burns, as well as in electrical or radiation burns
Genital reconstruction techniques	Perform post-radiation and post-traumatic reconstructive vaginoplasty using grafts and flaps
	Perform labiaplasty, using radiofrequency and CO2 laser surgery
	Address post hymenoplasty after intentional and traumatic hymenectomy
	Perform surgical reconstruction in cases of genital mutilation, clitoridectomy and infibulation
	Intervene in congenital and acquired anomalies of the male genital system
Treatment of surgical site infections in reconstructive surgery	Identify causative microorganisms
	Verify factors that affect the inflammatory and immunological response of the surgical patient
	Determine the classification of severity of SSI
	Apply postoperative infection preventive measures
	Apply antibiotic prophylaxis
	Determine antimicrobial treatment and focus control in the surgical patient

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions for Practical Training

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Clinical Internship?

TECH, in its maxim to offer the best training of the moment to its students, is committed to practical training in professional teams. To this end, it is reaching collaboration agreements with leading health institutions in the field of reconstructive plastic surgery to facilitate the learning of students through intensive stays in which they can learn about the day to day of the sector. Thus, professionals will be able to treat real patients and handle the latest technology in this field.





“

Surround yourself with the best team of reconstructive plastic surgeons and learn how to perform successful interventions”



Students will be able to take the practical part of this Hybrid Professional Master's Degree in the following centers:



Medicine

Clínica Granada Tiagonce


Country	City
Spain	Madrid

Address: Carretera de Humera 63, Chalet 4 en Pozuelo de Alarcón 28223 (Madrid)

Center for Plastic and Aesthetic Medicine and Surgery

Related internship programs:

- Aesthetic Plastic Surgery
- Reconstructive Plastic Surgery



Medicine

Clínicas Revitae


Country	City
Spain	Cáceres

Address: C. San Juan de Dios, 3, 10001 Cáceres

Center specialized in Advanced Aesthetic

Related internship programs:

- Aesthetic Medicine
- Aesthetic Plastic Surgery



Medicine

Dr. Sebastián Ríos

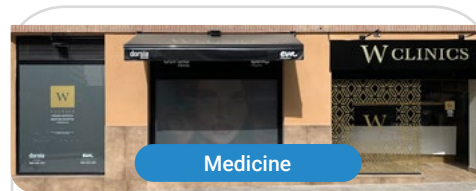
Country	City
Spain	Las Palmas

Address: C. Senador Castillo Olivares, 15, 35003 - Las Palmas de Gran Canaria

Clinic specializing in Facial Plastic Surgery and Aesthetic Medicine

Related internship programs:

- Aesthetic Plastic Surgery
- Reconstructive Plastic Surgery



Medicine

Dorsia Alicante San Vicente


Country	City
Spain	Alicante

Address: C. San Vicente, 8, 03004 Alicante

Dorsia has a large team of medical professionals specialized in the areas of surgery and aesthetic medicine.

Related internship programs:

- Aesthetic Nursing
- Antiaging



Medicine

Clínica Opción Médica

Country	City
Spain	Barcelona

Address: C/ de Calvet, 24, 08021 Barcelona

Aesthetic-surgical center specialized in Obesity.

Related internship programs:

- Aesthetic Plastic Surgery
- Gynecoesthetics



ROC Clinic-clínica de urología

Country
Spain

City
Madrid

Address: P.º del Gral. Martínez Campos, 17,
Chamberí, 28010 Madrid

Experts in research and state-of-the-art clinical
therapies for Urology.

Related internship programs:

- Aesthetic Plastic Surgery
- Aesthetic Medicine

09

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





“

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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:

1. 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.



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 years old.

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

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

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



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



Study Material

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



10 Certificate

The Hybrid Professional Master's Degree in Reconstructive Plastic Surgery guarantees, in addition to the most rigorous and updated training, access to a Hybrid Professional Master's Degree issued by TECH Technological University.



The background of the page features three black graduation caps (mortarboards) against a bright blue sky with light, wispy clouds. The caps are positioned at different angles, creating a sense of depth and movement. The bottom right corner of the page is a white triangular area where the text is located.

“

*Successfully complete this program
and receive your university qualification
without having to travel or fill out
laborious paperwork"*

This **Hybrid Professional Master's Degree in Reconstructive Plastic Surgery** contains the most complete and up-to-date program on the professional and educational field.

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree diploma issued by TECH Technological University via tracked delivery*.

In addition to the diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.

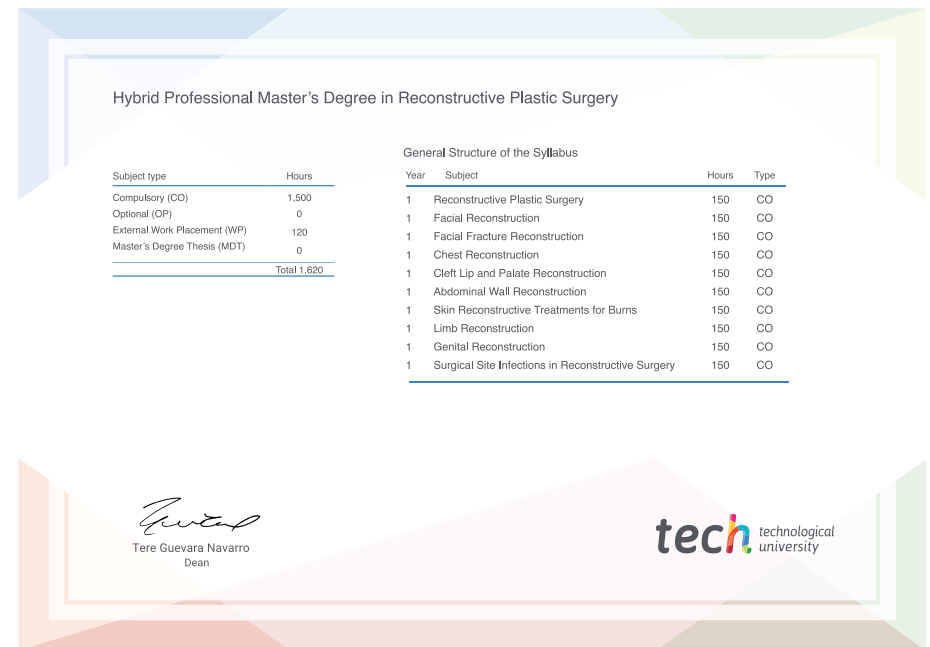
Title: **Hybrid Professional Master's Degree in Reconstructive Plastic Surgery**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Technological University**

Teaching Hours: **1,620 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.



Hybrid Professional Master's Degree

Reconstructive Plastic Surgery

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

Hybrid Professional Master's Degree Reconstructive Plastic Surgery