MASTER IN HAND AND UPPER EXTREMITY SURGERY

PROGRAM

The Master's program in Hand and Upper Extremity Surgery includes the following modules:

Module 1. Hand Surgery. 6 credits

Module 2. Wrist Surgery. 12 credits

Module 3. Nerve Surgery, Bone and Soft Tissue Reconstruction. Congenital Disorders and Other Hand Pathologies. 6 credits

Module 4. Open Shoulder Surgery. 12 credits
Module 5. Arthroscopic Shoulder and Elbow Surgery. 6 credits
Module 6. Elbow and Forearm Surgery. 6 credits
Module 7. Master's final project. 12 credits

To obtain the Master's degree during the academic year, students must enroll in the 60 ECTS credits, which include the modules Wrist and Hand Surgery (1 to 3) and Shoulder and Elbow Surgery (4 to 6), as well as module 7 of the Master's Final Project. The teaching period is year-round, for the entire academic year, 60 ECTS credits.

The Master's degree will allow them to acquire sufficient theoretical and practical knowledge to take the European Diploma in Hand Surgery from the Federation of European Societies of Hand Surgery - European Board of Hand Surgery Diploma examination (FESSH).

SYLLABUS

MODULE 1. HAND SURGERY (6 credits)

Extensor Tendon Injuries

Flexor Tendon Injuries

Metacarpal and Phalangeal Fractures

Base of the Thumb Fractures: Bennett and Rolando

Osteoarthritis of the Base of the Thumb Joint: Classification, Diagnosis, and Treatment of Rhizarthrosis

Dislocations and Ligament Injuries of the Fingers

Finger Joint Stiffness

PIP and MCP Arthroplasty of Fingers

MCP, PIP, and DIP Arthrodesis of Fingers

Dupuytren's Contracture

De Quervain's Tenosynovitis

Acute Hand Infections

Chronic Infections

MODULE 2. WRIST SURGERY (12 credits)

Wrist arthroscopy: anatomy, diagnosis, and surgical procedures.

Scapholunate ligament ruptures: classification, diagnosis, and treatment.

Partial and total wrist arthrodesis.

Wrist arthroplasty.

Distal radioulnar joint instability.

Rupture of the triangular fibrocartilage complex: classification and treatment.

Distal radius fractures.

Treatment of the sequelae of radius fractures: Corrective osteotomy, Sauvé-Kapandji and Darrach techniques, and ulnar head implants.

Ulna-carpal impingement syndrome: Ulnar shortening osteotomy.

Kienböck's disease.

Fracture and nonunion of the carpal scaphoid. Classification and surgical treatment (vascularized bone grafting).

Perilunar and transscaphoid dislocations.

Fractures of other carpal bones.

MODULE 3. NERVE SURGERY, BONE AND SOFT TISSUE RECONSTRUCTION (6 credits)

Compression Neuropathies
Thoracic Outlet Compression Syndrome
Nerve Repair
Radial Nerve Palsy
Median Nerve Palsy
Ulnar Nerve Palsy
Cerebral Palsy
Upper Extremity Dysfunction Following Stroke or Brain Injury
Tetraplegia
Traumatic Brachial Plexus Injuries
Principles of Microsurgery
Reimplantation
Skin Grafts and Skin Flaps
Free and Composite Skin Flaps
Thumb Reconstruction
Hand and Finger Deformities
Compartment Syndrome
Complex Regional Pain Syndrome
Rheumatoid Arthritis
Burned Hand
Skin, Bone, and Soft Tissue Tumors
Vascular Disorders

MODULE 4. OPEN SHOULDER SURGERY (12 credits)

Anatomy of the shoulder
Congenital anomalies of the shoulder
Clinical examination and radiological evaluation of the shoulder
Anesthesia in shoulder surgery
Indications, access routes, and biomechanics of open shoulder surgery
Indications for shoulder arthroplasty: Anatomical and reverse
Neurological problems in the shoulder. Tendon transfers in shoulder paralysis
Shoulder tumors

Shoulder infections

The shoulder in sports

Clavicle and scapula fractures

Acromioclavicular and sternoclavicular joint disorders

Proximal humerus fractures: Classification and treatment

Humeral shaft fractures: Treatment and associated injuries

MODULE 5. ARTHROSCOPIC SHOULDER AND ELBOW SURGERY (6 credits)

Principles of arthroscopic shoulder surgery

Rotator cuff

Glenohumeral instability

Calcific tendonitis

Bicipital tendon injuries

Stiff shoulder

Arthroscopic rotator cuff repair techniques

Arthroscopic repair techniques for shoulder instabilities

Acute repair of distal clavicle fractures and dislocations.

Repair of chronic distal clavicle fractures and dislocations.

Upper extremity tumor reconstruction surgery (modular shoulder megaprostheses, composite megaprostheses, intercalary grafts, osteoarticular grafts).

MODULE 6. ELBOW AND FOREARM SURGERY (6 credits)

Elbow Arthroscopy: Portals, Indications, and Techniques

Distal Humerus Fractures: Access Routes, Internal Fixation, Osteotaxis

Radial Head Fractures: Internal Fixation versus Prosthesis: Indications and Techniques

Proximal Ulna Fractures

Treatment of Sequelae and Pseudarthrosis of Elbow Fractures

Complex Traumatic Elbow Dislocation or Terrible Triad

Recurrent Elbow Instability

Forearm Fractures: Galeazzi, Essex-Lopresti, and Monteggia

Treatment of the Stiff Elbow

Total Elbow Arthroplasty: Implant Design, Indications, Access Routes, Techniques, and Results

Elbow Arthrodesis

MODULE 7. MASTER'S FINAL PROJECT (12 credits)