



# MASTER'S DEGREE IN NEUROREHABILITATION (60 ECTS)

## INSTITUT GUTTMANN

by the Universitat Autònoma de Barcelona



4<sup>th</sup> EDITION 2023-2024

The main objective of the master's degree is for students to acquire the specialized knowledge and skills necessary to address the assistance of the patient with spinal cord injury, acquired brain injury or another neurological disability, in a global and integral manner, in adult and pediatric age. From a physical, psychic and social dimension, optimize the generation and transfer of new knowledge in the specialized field of neuroscience and neurorehabilitation.

It is structured in 60 ECTS, to be done in an academic year.  
All classes will be taught at the Institut Guttmann.

### S01: Neurorehabilitation and physical activity

The bio-psycho-social model | Quality in Neurorehabilitation | Hospital discharge planning | Physical activity and sport as a rehabilitation tool | The competitive sport | Sport as a means of socialization and maintenance of health

### S02: Principles of Neuroscience

Structure and function of the nervous system | Methods of evaluation of the nervous system | Physiopathology and mechanisms of Nervous System injuries

### S03: Research and Innovation in Neurorehabilitation

Research lines and scientific evidences | Methodological tools to develop research projects | Biomedical data storage and analysis programs | Ethical principles in human and experimental research | Definition of innovation, presentation of new technologies in rehabilitation and methodology for the definition of clinical requirements



### **S04: Physiopathology and Therapeutic Approaches of Spinal Cord Injuries**

Epidemiology and clinic of SCI | Neurological exploration | Clinical and surgical treatment | Therapeutic approach of the main complications

### **S05: Physiopathology and Therapeutic Approaches to Brain Damage and Neurodegenerative Diseases, in Adults and Children**

Epidemiology, diagnosis and Neurorehabilitation treatment of TBI | Epidemiology, diagnosis and neurological treatment and rehabilitation of the ICTUS | Introduction to diagnosis, evaluation and Neurorehabilitation treatment of

neurodegenerative diseases | Neuropsychological rehabilitation | Diagnosis and treatment of neurogenic dysphagia | Logopedic rehabilitation.

### **S06: Work Placement**

Practices in the in the care areas of the Institut Guttmann: medical area, nursery area , functional rehabilitation area (gym, occupational area, swimming pool, musicotherapy, walking laboratory, computer room, etc.), area of neuropsychology and in the research areas

### **S07: Master's Degree Dissertation**

Prepare a project in the field of Neurorehabilitation and defend it before a court.



SUBJECTS	ECTS	DATES
Neurorehabilitation and physical activity	6 ECTS	Sep. 18 <sup>th</sup> – 22 <sup>nd</sup> and Sep. 26 <sup>th</sup> – 28 <sup>th</sup> 2023 (morning)
Principles of Neuroscience	6 ECTS	Oct. 16 <sup>th</sup> – 20 <sup>th</sup> and Oct. 23 <sup>th</sup> – 27 <sup>th</sup> 2023 (morning)
Research and Innovation in Neurorehabilitation	6 ECTS	Nov. 06 <sup>th</sup> – 09 <sup>th</sup> 2023 and Apr. 08 <sup>th</sup> – 11 <sup>th</sup> 2024 (morning)
Physiopathology and Therapeutic Approaches of Spinal Cord Injuries	9 ECTS	Nov. 20 <sup>th</sup> – 24 <sup>th</sup> and Nov. 27 <sup>th</sup> – Dec. 01 <sup>st</sup> 2023 (morning and afternoon)
Physiopathology and Therapeutic Approaches to Brain Damage and Neurodegenerative Diseases, in Adults and Children	9 ECTS	Dec. 11 <sup>th</sup> – 15 <sup>th</sup> , Dec. 18 <sup>th</sup> – 22 <sup>th</sup> and 2023 (morning and afternoon)
Work Placement	15 ECTS	Will be specified in tutoring
Work Placement	9 ECTS	Will be specified in tutoring

**Application for admission** through [www.uab.cat](http://www.uab.cat)

**More information in the** Teaching section of the website [www.guttmann.com](http://www.guttmann.com)

**Coordinator:** Dr. Josep Medina. Doctor in Psychology. Diploma in Physiotherapy

**Teaching secretary - I. Guttman**

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Schedule: Work days from 8,15h to 17,00h

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