

# INSTITUTE OF PHYSIOTHERAPY (IPHY)

## MASTER IN PHYSIOTHERAPY OF PHYSICAL ACTIVITIES AND SPORT

**Main Language of Instruction:**  
French  English  Arabic

**Campus Where the Program Is Offered:** CSM

### **OBJECTIVES**

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The Master in Physiotherapy of Physical Activities and Sport aims to develop the theoretical and practical knowledge of physiotherapists in specific areas to enable them to intervene with athletes or patients for whom physical activity is beneficial.

It prepares students for the role of physiotherapist for a sports team, equipping them with essential knowledge to integrate into the multidisciplinary team that manages the training and performances of athletes throughout the sports season.

At the end of this program, students will be able to assist an injured athlete from the moment of the accident on the field until the moment of resumption of their sporting activity, including the rehabilitation phase specific to the discipline.

This program is not limited to intervention with athletes; it also allows candidate physiotherapists to engage with populations with specific needs: paraplegia, cardio-respiratory pathologies, diabetes or obesity. This is achieved through advanced knowledge relating to the impact of physical activity on the body's different physiological systems.

### **PROGRAM LEARNING OUTCOMES (COMPETENCIES)**

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- Master complex knowledge and skills to care for athletes and patients suffering from chronic conditions
- Promote scientific reasoning in the field of sports and physical activity
- Adapt professional communication
- Develop autonomy and build a professional project aimed at continuous development
- Adopt a professional attitude towards athletes and patients with chronic illnesses
- Contribute scientifically and qualitatively to the evolution of practice, through research in the field of sports and physical activity.

### **ADMISSION REQUIREMENTS**

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Admission on file (baccalaureate + 4): hold a Bachelor in Physiotherapy

### **COURSES/CREDITS GRANTED BY EQUIVALENCE**

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120 credits with 60 credits are granted by equivalence from the basic physiotherapy training which is 240 credits.

### **PROGRAM REQUIREMENTS**

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**120 credits: 60 credits awarded by equivalence, Required Courses (60 credits).**

#### **Required Courses (60 Cr.)**

Physical Activities and Disability (2 Cr.). Physical Activities and Insufficiency of the Cardiovascular and Respiratory Systems (3 Cr.). Physical Activities and Nutrition (2 Cr.). Surgical Approach to Sports Injuries (1 Cr.). Preliminary Research Project (4 Cr.). Tissue and Functional Biomechanics of the Musculoskeletal System (3 Cr.). Doping: Sports Practices and Controls (1 Cr.). Energetics of Physical Activity (4 Cr.). Maintenance of Posture and Gestures (4 Cr.). Thesis (8 Cr.). Master's Research Methodology (2 Cr.). Means and Tests of Clinical Explorations (3 Cr.). Physical Preparation (3 Cr.). Psychology of Sport and Physical Activity (1 Cr.). Rehabilitation of Athletes' Injuries (4 Cr.). Clinical Internship 1 (5 Cr.). Clinical Internship 2 (5 Cr.). Structures and Regulations in a Sport Environment (1 Cr.). Manual Therapy Adapted to Athletes (4 Cr.).

## SUGGESTED STUDY PLAN

### Semester 1

Code	Course Name	Credits
039ACPAM4	Physical Activities and Disability	2
039APIAM4	Physical Activities and Insufficiency of the Cardiovascular and Respiratory Systems	3
039ACPNM4	Physical Activities and Nutrition	2
039APCHM3	Surgical Approach to Sports Injuries	1
039DPSCM4	Doping: Sports Practices and Controls	1
039EACPM3	Energetics of Physical Activity	4
039TMASM3	Manual Therapy Adapted to Athletes	4
039REASM3	Rehabilitation of Athletes' Injuries	4
<b>Total</b>		<b>21</b>

### Semester 2

Code	Course Name	Credits
039BTAFM3	Tissue and Functional Biomechanics of the Musculoskeletal System	3
039ENPGM4	Maintenance of Posture and Gestures	4
039MERMM3	Master's Research Methodology	2
039MTECM3	Means and Tests of Clinical Explorations	3
039PRPPM3	Physical Preparation	3
039PSAPM3	Psychology of Sport and Physical Activity	1
039SRMSM4	Structures and Regulations in a Sport Environment	1
<b>Total</b>		<b>17</b>

### Semester 3

Code	Course Name	Credits
039MEMRM4	Thesis	8
039STAIM3	Clinical Internship	5
039AVPRM4	Preliminary Research Project	4
<b>Total</b>		<b>17</b>

### Semester 4

Code	Course Name	Credits
039STIIM4	Clinical Internship 2	5
<b>Total</b>		<b>5</b>

## **COURSE DESCRIPTION**

<b>039ACPAM4</b>	<b>Physical Activities and Disability</b>	<b>2 Cr.</b>
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This course provides students with the necessary knowledge to adapt physical activities for disabled people.

<b>039APIAM4</b>	<b>Physical Activities and Insufficiency of the Cardiovascular and Respiratory Systems</b>	<b>3 Cr.</b>
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This course allows students to adapt physical rehabilitation activities specific to cardiovascular and respiratory system pathologies.

<b>039ACPNM4</b>	<b>Physical Activities and Nutrition</b>	<b>2 Cr.</b>
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This course allows students to deepen their understanding of the fundamental concepts of sports nutrition and acquire nutritional knowledge tailored to several factors: the type of physical activity practiced (aerobic, anaerobic), the nature of the sport, the sports season.

<b>039APCHM3</b>	<b>Surgical Approach to Sports Injuries</b>	<b>1 Cr.</b>
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This course allows students to acquire knowledge about the different sports-related pathologies that require surgical treatment and to understand the primary surgical interventions in the sports field and their physiotherapeutic consequences.

<b>039AVPRM4</b>	<b>Preliminary Research Project</b>	<b>4 Cr.</b>
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This course allows students to begin preparing their final thesis. It allows them to pose a research problem and define the necessary elements for their research work plan.

<b>039BTAFM3</b>	<b>Tissue and Functional Biomechanics of the Musculoskeletal System</b>	<b>3 Cr.</b>
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This course allows students to acquire in-depth knowledge of the basic principles of the biomechanics of sports movements, aiming to better assess the risks of injuries.

<b>039DPSCM4</b>	<b>Doping: Sports Practices and Controls</b>	<b>1 Cr.</b>
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This course allows students to acquire in-depth knowledge of doping methods and substances.

<b>039EACPM3</b>	<b>Energetics of Physical Activity</b>	<b>4 Cr.</b>
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This course aims to deepen students' knowledge of basal and exercise metabolism in humans and to introduce them to the design of training programs.

<b>039ENPGM4</b>	<b>Maintenance of Posture and Gestures</b>	<b>4 Cr.</b>
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This course allows students to gain the neuroanatomological and physiological knowledge necessary for a better understanding of postural control. Subsequently, they will be able to apply this knowledge to different sporting activities.

<b>039MEMRM4</b>	<b>Thesis</b>	<b>8 Cr.</b>
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The thesis allows the physiotherapist researcher to apply the knowledge acquired through theoretical and clinical teaching by carrying out concrete work that enables them to fulfill the role of knowledge producer.

<b>039MERMM3</b>	<b>Master's Research Methodology</b>	<b>2 Cr.</b>
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This course teaches students to conduct research and write their activity reports according to international standards.

**039MTECM3      Means and Tests of Clinical Explorations      3 Cr.**

This course allows students to broaden their knowledge of the methods and means of clinical exploration in the different areas of sport and physical activity. In addition, it introduces the different measuring instruments and their use in clinical explorations.

**039PRPPM3      Physical Preparation      3 Cr.**

This course allows students to master general and specific physical preparation techniques relating to individual and team sports.

**039PSAPM3      Psychology of Sport and Physical Activity      1 Cr.**

By the end of this course, students will learn how psychological factors affect individual physical performance. They will understand how participation in sports and physical activity influences psychological development, health, and well-being, as well as how to accelerate rehabilitation processes.

**039REASM3      Rehabilitation of Athletes' Injuries      4 Cr.**

This course deepens students' understanding of high-level sports and the unique pathologies affecting elite athletes. They will learn to manage the athlete's medical logbook and apply specialized rehabilitation techniques tailored to the needs of top-tier athletes.

**039STAIM3      Clinical Internships      15 Cr.**

This internship allows students to accurately complete an athlete's medical log and prepare a field kit. Additionally, students will gain experience in performing specific on-site tests for injured athletes and will acquire essential techniques for emergency care intervention on the field.

**039STIIM4      Clinical Internships      25 Cr.**

This internship allows students to manage a sports team by following selective and multifaceted micro-cycle planning.

Students will learn to plan and implement active and passive recovery sessions (low-intensity activity, light swimming, cycling, massage, hot bath).

Additionally, they will gain the skills to support the multidisciplinary team in a sports environment (doctor, psychologist, nutritionist, physical trainer, trainer, dentist, etc.) and conduct regular monitoring of the sports team including training sessions, competitions, and training camps.

**039SRMSM      Structures and Regulations in a Sport Environment      4 Cr.**

This course familiarizes students with the organizations governing sports competitions and the regulations for organizing national, regional and international competitions.

**039TMASM3      Manual Therapy Adapted to Athletes      4 Cr.**

This course enables students to approach manual therapy within the sports field through a comprehensive, holistic perspective.