

MASTER IN MEDICAL MICROBIOLOGY

Curriculum (4 SEMESTERS – 2 YEARS | 120 ECTS CREDITS)

1st year (60 ECTS)

1 st semester (30 ECTS – nuclear/mandatory Curricular Units)	ECTS
Introduction to Microbiology, Microbial Genetics and Recombinant DNA Technology	6
Immunity and Infection	2
Medical Bacteriology	7
Medical Virology	7
Introduction to Medical Mycology	2
Prevention and Treatment of Infectious Diseases	2
Theory and Methods in Epidemiology and Biostatistics	2
Bioethics and Safety Laboratory Quality Assurance	2
2 nd semester (30 ECTS – optional Curricular Units)	ECTS
<i>Optional Module I</i>	6
Sexually Transmitted Infections (IHMT NOVA)	
The Role of the Microbiome in Health and in the Disease (FCM NMS)	
Tuberculosis and Atypical Mycobacteriosis (IHMT NOVA)	
<i>Optional Module II</i>	6
Molecular Biology and Epidemiology of Gram-Positive Pathogenic Bacteria (ITQB NOVA)	
Molecular Epidemiology of Human Immunodeficiency Virus (HIV) (IHMT NOVA)	
Bacterial Molecular Genetics: Concepts and Applications of the New Biology of RNA (ITQB NOVA)	
<i>Optional Module III</i>	6
Therapeutic Applications of Technologies Based on Nucleic Acids (IHMT NOVA)	
Microbial Development and Pathogenesis (ITQB NOVA)	
<i>Legionella</i> Infection (FCM NMS)	
Mechanisms of Antibiotic Resistance (no IHMT NOVA)	
<i>Optional Module IV</i>	6
Human Cytomegalovirus Infections (FCM NMS)	
Emergent and Reemergent Viral Infections (IHMT NOVA)	
Leptospirosis and Lyme Borreliosis: Reemerging Diseases in the Global World (IHMT NOVA)	
<i>Optional Module V</i>	6
Molecular Diagnostics in Medical Microbiology (IHMT NOVA)	
Biofilms in Chronic Infections (FCT NOVA)	
Molecular and Cellular Mechanisms of Bacterial Pathogenesis (FCT NOVA)	

2nd year (60 ECTS)

1 st and 2 nd semester (60 ECTS – Experimental work and preparation of original Thesis)	ECTS
Master Thesis in Medical Microbiology	60