

LM-41 Single-Cycle Master Degree Course in Medicine and Surgery
University of Catania

Study Plan

First year

First semester

PRINCIPLES OF THE HUMAN MATTER	10
Applied physics	4
Chemistry and biochemistry propedeutics	6
THE CELL: MOLECULES AND PROCESSES (annual)	7
Molecular biology I	2
Applied biology I	3
Medical genetics I	2
BODY ARCHITECTURE (annual)	6
Histology, cytology, embriology and organogenesis	6
TECH HEALTH INFORMATICS	3

Second semester

THE CELL: FUNCTIONS AND REGULATIONS	9
Cellular physiology	4
Biochemistry	5
THE CELL: MOLECULES AND PROCESSES (annual)	7
Molecular biology II	1
Applied biology II	4
Medical genetics II	2
BODY ARCHITECTURE (annual)	8
Regional anatomy and gross neuroanatomy	8

FUTURE HEALTH AND THE CLIMATE CHANGES	2
ADDITIONAL LANGUAGE KNOWLEDGE	3
PROFESSIONALIZING ACTIVITIES	2

Second year

First semester

BODY FUNCTIONS 1	10
Human physiology	5
Biochemistry	2
Organ structure	3
DISEASE ONSET 1	12
General pathology and immunology	6
Microbiology	3
Principles of anatomopathology	3
TECH BIO-ENGINEERING	6
TECH Tissue engeneering, bioprinting	2
TECH Scaffolding and organoids	4

Second semester

BODY FUNCTIONS 2	14
Human physiology	7

	Biochemistry	3
	Organ structure	4
	DISEASE ONSET 2	12
	General pathology and immunology	6
	Microbiology	3
	Principles of anatomopathology	3
FUTURE	WATER, FOOD AND SUSTAINABLE DIETS	3
	PROFESSIONALIZING ACTIVITIES	3

Third year		
First semester		
	BASICS OF DIAGNOSTICS AND PHARMACOLOGY	5
	General pharmacology	3
	Introduction to diagnostic imaging	2
	DISEASES OF THE CARDIOVASCULAR AND ENDOCRINE SYSTEMS	14
	Applied pharmacology	2
	Anatomopathology	1
	Cardiovascular diseases	4
	Endocrinology	3
	Vascular surgery	2
	Cardiac surgery	1
	Applied diagnostics	1
TECH	ARTIFICIAL INTELLIGENCE, MACHINE LEARNING AND BIG DATA	3
	PROFESSIONALIZING ACTIVITIES	6
Second semester		
	DISEASES OF THE RESPIRATORY AND URO-NEPHROLOGICAL SYSTEMS	10
	Applied pharmacology	1
	Respiratory diseases	3
	Kidney diseases and transplantation	2
	Thoracic surgery	1
	Urology	2
	Applied diagnostics	1
	DISEASES OF THE SKULL AND SENSE ORGANS	6
	Odontostomatological Diseases	1
	Maxillofacial surgery	1
	Ophtalmological Diseases	2
	Otorhinolaryngological Diseases	2
	BEING A MEDICAL DOCTOR	5
	Clinical psychology	2
	History of medicine and bioethics	2
	Sociology and communication skills	1
FUTURE	TELEMONITORING AND PROXIMITY MEDICINE	2
	PROFESSIONALIZING ACTIVITIES	6

Fourth year		
First semester		
	DISEASES OF THE GASTROENTERIC SYSTEM	9

	Applied pharmacology	2
	Anatomopathology	1
	Gastroenterology	3
	General surgery	2
	Applied diagnostics	1
	DISEASES OF THE BONES AND JOINTS	4
	Orthopedics	3
	Radiology	1
	LAB WORKS	5
	Clinical biochemistry and clinical molecular biology	1
	Clinical pathology	1
	Microbiology and clinical microbiology	2
	Technical and laboratory medical sciences	1
TECH	MEDICAL AND SURGICAL ROBOTICS	2
	PROFESSIONALIZING ACTIVITIES	6
Second semester		
	RHEUMATOLOGICAL, INFECTIOUS AND SKIN DISEASES	8
	Applied pharmacology	1
	Reumatology	1
	Infectious diseases	4
	Dermatology	2
	GLOBAL HEALTH, PUBLIC HEALTH AND COMMUNITY MEDICINE	9
	General and applied hygiene	4
	Wellness and exercise medicine	1
	Biostatistics	4
FUTURE	VACCINE PREVENTABLE INFECTIOUS DISEASES AND EPIDEMICS	4
	Epidemic intelligence and outbreak response	1
	Advanced medical therapy products (AMTPs) 1	1
	Advanced medical therapy products (AMTPs) 2	1
	Advanced medical therapy products (AMTPs) 3	1
	PROFESSIONALIZING ACTIVITIES	7

Fifth year		
First semester		
	BRAIN AND NERVOUS SYSTEM DISEASES	14
	Neuro-psycho-pharmacology	2
	Anatomopathology	1
	Psychiatry	4
	Neurology	4
	Neurosurgery	2
	Neuroradiology	1
	PATIENT MANAGEMENT 1	8
	Internal medicine	4
	General surgery	4
TECH	DIGITAL HEALTH AND TECHNOLOGICAL INNOVATION	3
	PROFESSIONALIZING ACTIVITIES	5
Second semester		
	OBSTETRICS, GYNECOLOGY AND PEDIATRIC DISEASES	11

	Anathomopathology	1
	Pedriatic and child surgery	1
	Pediatrics	4
	Infant neuropsychiatry	1
	Applied diagnostics	1
	Obstetrics and gynecology	3
	CLINICAL AND MOLECULAR PRINCIPLES OF CANCER MEDICINE	12
	Applied pharmacology	2
	Molecular diagnostics	2
	Medical oncology	4
	Blood diseases	4
FUTURE	HEALTH IN COUNTRIES WITH PROTRACTED CONFLICTS, REFUGEES AND MIGRANTS	4
	Health in countries with protracted conflicts	2
	Refugees and migrants health	2
	PROFESSIONALIZING ACTIVITIES	5

Sixth year		
First semester		
	EMERGENCIES	11
	Emergency medicine	3
	Emergency surgery	3
	Plastic surgery	1
	Anesthesiology and life support	4
	FORENSIC AND OCCUPATIONAL MEDICINE	4
	Forensic medicine	2
	Occupational medicine	2
	PATIENT MANAGEMENT 2	6
	Internal Medicine	3
	General surgery	3
TECH	FROM IDEAS TO PATENTS	6
	Health technology assessment	1
	Health technology assessment on drug development	1
	Clinical research and development	2
	Technology transfer and patents	2
	PROFESSIONALIZING ACTIVITIES	5
Second semester		
	ELECTIVE ACTIVITIES	8
	PROFESSIONALIZING ACTIVITIES - CLINICAL FIELD	5
	PROFESSIONALIZING ACTIVITIES - SURGICAL FIELD	5
	PROFESSIONALIZING ACTIVITIES - GENERAL MEDICINE	5
	FINAL EXAM	15