

# UNIVERSITA' DEGLI STUDI DI MILANO PROGRAMME DESCRIPTION - ACADEMIC YEAR 2021/22 SINGLE-CYCLE DEGREE

Medicine and Surgery - San Paolo Hospital Location (Classe LM-41) Enrolled from 2019/20 Academic Year

HEADING	
Degree classification - Denomination	LM-41 Medicine and surgery
and code:	
Degree title:	Dottore Magistrale
Length of course:	6 years
Total number of credits required to	360
complete programme:	
Years of course currently available:	1st , 2nd , 3rd
Access procedures:	Cap on student, student selection based on entrance test
Course code:	D53

## **PERSONS/ROLES**

Head of Study Programme Prof. Luca Mario Rossetti

**Tutors - Faculty** Per stage e tirocini: prof. Pier Maria Battezzati

Per la mobilità internazionale e l'Erasmus: prof.ssa Elisa Borghi (mobility.diss@unimi.it)

Per l'orientamento: prof. Luca Mario Rossetti

## **Degree Course website**

https://medicina-spaolo.cdl.unimi.it/it (8^ piano - Blocco C) - Via A. Di Rudinì, 8 Phone 02/503.23008 – 23012 (3^ piano - Blocco C) - Via A. Di Rudinì, 8 Phone 02/503.23011 – 23027

Email: segrdid.sanpaolo@unimi.it Email: servdid.diss@unimi.it

# CHARACTERISTICS OF DEGREE PROGRAMME

## General and specific learning objectives

The Master's degree programme in Medicine contemplates 360 CFU overall, spread out over six years, of which 60 must be earned as part of coursework aimed at developing specific professional acumen. The programme is intended to provide the scientific bases, and the necessary practical skills and theory required under Directive 75/363/EU to practice medicine, as well as the methodology and experience to engage in continuing medical education after graduation; it also instils professional, decision-making, and operational autonomy thanks to an educational programme that takes a holistic approach to the health of all persons, sick and well, and includes training in assessing the chemical-physical, biological, and social environment of the patient.

The specific objectives for the pre-clinical coursework are set, on a priority basis, based on the following criteria: relevance of each objective within the framework of human biology; the preparation provided by each objective in terms of specific clinical issues.

The specific objectives for the clinical coursework are set, on a priority basis, based on the following criteria: epidemiological prevalence, urgency of the care needed, possibility of providing care, severity, educational value; promote clinical work through healthcare facilities, at least for the hospital wards;

improving patient interactions, including the physician's bedside manner;

assessing adverse events and any other issue relating to the use of medicine (Pharmacovigilance) to ensure a favourable risk/benefit ratio for the community;

assessing gender-based differences (Gender Medicine), with the ultimate goal of ensuring all persons, whether male or female, receive the best possible care.

These objectives integrate the five Dublin descriptors (European descriptors) with those proposed by the International Medical Education (IIME) and the "The TUNING Project (Medicine) – Learning Outcomes/Competences for Undergraduate Medical Education in Europe". Furthermore, they align perfectly with the requirements of the "core curriculum" for the Master's degree in Medicine as proposed on a national level by the Conference of Italian Master-Degree Programme Presidents.

#### Professional profile and employment opportunities

The degree in Medicine allows the graduate to sit for the State Exam to be licensed to practice medicine. Once the graduate has passed the exam, they can enrol in the professional association as a licensed, non-specialised physician. Licensed, non-specialised physicians are eligible for the Post-Graduate Programmes in Medicine and Medical Services (4-5 year programme) and the Internal Medicine Programme (3-year programme).

Licensed physicians can practice medicine in a variety of professional roles, whether through clinical practice, healthcare policy and management, or the biomedical sciences. Potential avenues for employment include:

becoming a National Health Service doctor, or working with a public or state agency (post-graduate degree in medicine required);

research in clinical or pre-clinical practice, as part of a university career, or through work with a research entity (a PhD is recommended);

working as a freelance professional (post-graduate degree required to practice as a specialist, as well as completion of a training programme in Internal Medicine to practice as a licensed, non-specialty physician).

The practice of medicine is regulated by Italian law.

# EXPERIENCE OF STUDY ABROAD AS PART OF THE TRAINING PROGRAM

The University of Milan supports international mobility by providing its students with the opportunity to spend study and internship periods abroad. It is a unique chance to enrich your educational path in a new exciting environment.

The agreements entered into by the University with over 300 universities from the 27 EU member countries and other Extra-EU countries under the European Erasmus+ programme allow regularly enrolled students to carry out part of their studies at one of the partner universities or to undertake internships at companies, training and research centres and other organizations.

Similar international mobility opportunities are provided outside Europe, through agreements with a number of prestigious institutions.

#### Study and internships abroad

The Single-cycle degree programme in Medicine at the San Paolo Hospital Teaching Centre offers students the opportunity to complete a portion of their degree requirements on a study-abroad programme (1-12 month programmes). That option is available both through institutional channels like the European Erasmus programme, and through the "Clerkship" offered by IFMSA (International Federation of Medical Students Associations) of which the Italian Medical Students Association ("SISM") is a member. All coursework and other for-credit activities completed abroad must be authorised by the college of instructors for the particular degree programme. The transfer of all or any portion of such credits shall be carried out pursuant to the European Credit Transfer Systems (ECTS), and shall be applied against the student's degree requirements. The conversion of any marks earned abroad shall be into thirtieths, pursuant to the schedule approved by the Academic Senate.

#### How to participate in Erasmus mobility programs

The students of the University of Milan can participate in mobility programmes, through a public selection procedure.

- Ad hoc commissions will evaluate:
- Academic career
- the candidate's proposed study programme abroad
- his/her foreign language proficiency
- the reasons behind his/her application

#### Call for applications and informative meetings

The public selection generally begins around February each year with the publication of a call for applications specifying the destinations, with the respective programme duration (from 2/3 to 12 months), requirements and online application deadline.

Every year, before the deadline for the call, the University organizes informative meetings to illustrate opportunities and rules for participation to students.

#### Erasmus+ scholarship

The European Union grants the winners of the Erasmus+ programme selection a scholarship to contribute to their mobility costs, which is supplemented by the University funding for disadvantaged students.

Language courses Students who pass the selections for mobility programmes can benefit from intensive foreign language courses offered each year by the University.

Learn more at https://www.unimi.it/en/international/study-abroad/studying-abroad-erasmus

For assistance, please contact: International Mobility Office Via Santa Sofia 9 (second floor) Tel. 02 503 13501-12589-13495-13502 Contacts: InformaStudenti mobility.out@unimi.it Student Desk booking through InformaStudenti

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1st COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Anatomy (1st year)		BIO/16
Biology and genetics (1st year)		BIO/13
Chemistry and biochemistry		BIO/10
Histology and embriology	7	BIO/17 (1) MED/02, (3) M-
Medical humanities	4	(1) MED/02, (3) M- FIL/02
Medical humanities (qualifying activity)		
Medical physics	6	FIS/07
Total compulsory credits	44	]
2nd COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Anatomy (2nd year)		BIO/16
		(4) MED/03, (1)
Biology and genetics (2 year)	5	BÍO/13
Clinical medicine 2nd year		M-PED/01
Clinical medicine 2nd year (qualifying activity) Emergency medical and surgical care (2nd year) (qualifying activity)	1	MED/09 MED/41
General pathology and physiopathology	_	MED/04
Human physiology years 2		BIO/09
Immunology and immunopathology		MED/04
Medical english	3	L-LIN/12
Molecular bases of life	9	(3) BIO/11, (6) BIO/10
Total compulsory credits	53	
3rd COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Communication and relationship in medicine 3rd year	4	(2) MED/09, (2) M-
		PSI/08
Human pathology (3rd year) Human physiology		MED/08 BIO/09
Medical pharmacology (3rd year)		BIO/14
Microbiology	6	MED/07
		(1) MED/14, (1)
Semiotics and pathology of systems (qualifying activity)	6	MED/10, (1) MED/11, (2) MED/09, (1)
		MED/18
		(1) MED/03, (4)
	17	MED/14, (4)
Semiotics and pathology of systems 1	17	MED/10, (5) MED/11, (1) MED/09, (1)
		MED/24, (1) MED/18
Statistics and assessment of evidence in medicine		MED/01
Statistics and assessment of evidence in medicine (qualifying activity)		MED/01
Total compulsory credits	56	
4th COURSE YEAR (available as of academic year 2022/23) Core/compulsory cours	es/acti	vities common
Learning activity Communication and relationship in medicine 4th year		Sector M-PSI/08
Dermatologic clinics		MED/35
Dermatologic clinics (qualifying activity)		MED/35
Diagnostic imagining and radiotherapy	5	MED/36
Diagnostic imagining and radiotherapy (qualifying activity)		MED/36
Emergency medical and surgical care (4th year) (qualifying activity)		MED/33
Human pathology (4th year) Infectious diseases clinical		MED/08 MED/17
Infectious diseases clinical (qualifying activity)		MED/17 MED/17
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Medical pharmacology (4th year)		3	BIO/14
Medical surgical specialties		7	(1) MED/29, (1) MED/28, (3) MED/31, (2) MED/30
Medical surgical specialties (qualifying activity)		2	(1) MED/31, (1) MED/30
Public health		7	(1) SECS-P/06, (6) MED/42
Semiotics and pathology of systems 2		18	(1) MED/03, (4) MED/12, (4) MED/13, (4) MED/15, (1) MED/09, (3) MED/16, (1) MED/18
Semiotics and pathology of systems 2 (qualifying activity)		7	(1) MED/12, (1) MED/13, (1) MED/15, (2) MED/09, (1) MED/16, (1) MED/18
	Total compulsory credits	67	
5th COURSE YEAR (available as of academic year 2023/24) Co	ore/compulsory course	s/acti	vities common
Learning activity	<b>1</b> <i>V</i>	Ects	Sector
Clinical medicine 5th year		13	<ul> <li>(3) MED/04, (1) M-FIL/02, (2) M-PSI/01,</li> <li>(4) MED/09, (1) MED/17, (2) MED/06</li> </ul>
Clinical medicine 5th year (qualifying activity)		2	(1) MED/15, (1) MED/09
Clinical obstetrics and gynecology Clinical obstetrics and gynecology (qualifying activity)			MED/40 MED/40
Clinical orthopedics and traumatology		5	(4) MED/33, (1)
Clinical orthopedics and traumatology (qualifying activity)			MED/34 MED/33
Clinical training - Medicine Clinical training - Surgery			ND ND
Diseases of the nervous system		7	(1) MED/27, (5) MED/26, (1) MED/34
Diseases of the nervous system (qualifying activity)		2	MED/26
Emergency medical and surgical care (5th year) (qualifying activity) Human pathology (5th year)		1	MED/11 MED/08
Laboratory medicine		4	(1) MED/07, (1) MED/05, (2) BIO/12
Laboratory medicine (qualifying activity)			BIO/12
Medical pharmacology (5th year) Occupational health		3	BIO/14 MED/44
Psychiatry and behavioral psychology		5	(1) M-PSI/08, (4) MED/25
Psychiatry and behavioral psychology (qualifying activity)			MED/25
Surgery: clinics and therapy (5th year)			MED/18 (1) MED/21, (1)
Surgery: clinics and therapy (5th year) (qualifying activity)	1	3	MED/18, (1) MED/24
	Total compulsory credits	82	
6th COURSE YEAR (available as of academic year 2024/25) Co	ore/compulsory course	s/acti	vities common
Learning activity			Sector
Clinical medicine 6th year			MED/09 MED/09
Clinical medicine 6th year (qualifying activity) Clinical training - Internal Medicine			ND
Emergency medical and surgical care			(1) MED/09, (1) MED/18, (2) MED/41
Emergency medical and surgical care (6th year) (qualifying activity)			MED/41
General and specialised pediatrics			(1) MED/39, (5) MED/38
General and specialised pediatrics (qualifying activity) Legal medicine			MED/38 MED/43
Surgery: clinics and therapy (6th year)			MED/43 MED/18
Surgery: clinics and therapy (6th year) (qualifying activity)			MED/18
	Total compulsory credits	32	
Elective courses			
End of course requirements			
End of course requirements Final exam		19	NA
	Total compulsory credits	18	
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# **COURSE PROGRESSION REQUIREMENTS**

The course contains the following obligatory or advised prerequisites

Learning activity	Prescribed foundation courses	O/S		
Human physiology	Anatomy (2nd year)	Core/compulsory		
General pathology and physiopathology	Biology and genetics (2 year)	Core/compulsory		
Medical surgical specialties	General pathology and physiopathology	Core/compulsory		
Anatomy (2nd year)	Histology and embriology	Core/compulsory		
Clinical medicine 6th year	Semiotics and pathology of systems 2	Core/compulsory		
	Semiotics and pathology of systems 1	Core/compulsory		
	Human pathology (5th year)	Core/compulsory		
	Medical pharmacology (5th year)	Core/compulsory		
	Diagnostic imagining and radiotherapy	Core/compulsory		
Semiotics and pathology of systems 2	Human physiology	Core/compulsory		
	General pathology and physiopathology	Core/compulsory		
Semiotics and pathology of systems 1	Human physiology	Core/compulsory		
	General pathology and physiopathology	Core/compulsory		
Human pathology (5th year)	General pathology and physiopathology	Core/compulsory		
Emergency medical and surgical care	General pathology and physiopathology	Core/compulsory		
Clinical orthopedics and traumatology	General pathology and physiopathology	Core/compulsory		
Clinical obstetrics and gynecology	General pathology and physiopathology	Core/compulsory		
Infectious diseases clinical	General pathology and physiopathology	Core/compulsory		
Immunology and immunopathology	Biology and genetics (2 year)	Core/compulsory		
	Molecular bases of life	Core/compulsory		
General and specialised pediatrics	General pathology and physiopathology	Core/compulsory		
Surgery: clinics and therapy (6th year)	Semiotics and pathology of systems 2	Core/compulsory		
	Semiotics and pathology of systems 1	Core/compulsory		
	Human pathology (5th year)	Core/compulsory		
	Medical pharmacology (5th year)	Core/compulsory		
	Diagnostic imagining and radiotherapy	Core/compulsory		
Diseases of the nervous system	General pathology and physiopathology	Core/compulsory		
Dermatologic clinics	General pathology and physiopathology	Core/compulsory		