

# UNIVERSITA' DEGLI STUDI DI MILANO PROGRAMME DESCRIPTION - ACADEMIC YEAR 2023/24 SINGLE-CYCLE DEGREE

# Medicine and Surgery - San Paolo Hospital Location (Classe LM-41) Enrolled from 2022/23 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:	2nd
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 Camilla Tincati (mobility.diss@unimi.it)

Per l'orientamento: prof. Luca Mario Rossetti

## **Degree Course website**

https://medicina-spaolo.cdl.unimi.it/it

#### **Academic Office for the Degree Programme**

(8^ piano - Blocco C) - Via A. Di Rudinì, 8 Phone 02/503.23008 - 23012 Email: segrdid.sanpaolo@unimi.it

#### **Classroom-Administration Office**

(3^ piano - Blocco C) - Via A. Di Rudinì, 8 Phone 02/503.23011 – 23027 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.

#### Initial knowledge required

Admission into the programme is capped, at a national level, pursuant to Law no. 264 of 2 August 1999.

Requirements and knowledge requested for admission

Admission assessment

Admission into the Master's degree programme in Medicine and Surgery will be based on a written entrance exam (60-question, multiple-choice, "select one answer" exam), which will be given on the same day for all public universities in Italy.

The subject areas, and therefore the acumen, needed to be considered for the programme include: general knowledge, biology, chemistry, physics, and maths. Students must also demonstrate critical-thinking skills. For further details and/or information, please visit the website for the Ministry of Education and Research (MIUR).

The call for applications will be posted to the degree programme website: https://medicina-spaolo.cdl.unimi.it/it/iscriversi

Candidates who score at or above twenty (20) points will have a place on the national ranking, subject to the enrolment cap. To be permitted to sit for the entrance exam and, provided the student appears on the ranking, to be allowed to enrol in the Medicine programme, a candidate must have an upper-level secondary-school diploma, or similar diploma earned overseas and deemed equivalent.

Those who place (following the admission test) high enough in the ranking must enrol in the programme.

#### Additional learning requirements (OFA):

Students admitted with a total point score under 45/90 and with a score of less than 13.5/27 on those questions assessing a student's understanding of biology, will be assigned additional learning requirements (OFA). These prerequisites may be met through specifically assigned remedial work. Any failure to complete the OFA will make it impossible for the student to sit for the Biology and Genetics exams. Timely notice of the various courses will be posted to: https://medicina-spaolo.cdl.unimi.it/it.

Additional Learning Requirements (OFA): - English-language proficiency (Level B2):

To pass the English-language exam contemplated under the study plan, English-language proficiency at a B2 level under the Common European Framework of Reference for Languages (CFER) is required. Such proficiency may be demonstrated as follows:

- by sending a language certificate, earned within three years prior to the date of submission, at a B2 level or higher (for the list of language certificates recognised by the University, please review: https://www.unimi.it/it/studiare/competenze-linguistiche/placement-test-test-di-ingresso-e-corsi-di-inglese). Certificates must be uploaded at enrolment, or sometime thereafter, to: http://studente.unimi.it/uploadCertificazioniLingue;
- through a Placement Test, administered by SLAM during Year I, from October to December. Should a student fail the test, he/she must take the course provided by SLAM.

The Placement Test is mandatory for all students who fail to submit a valid certificate.

Those who do not take the Placement Test by December, or who fail to pass the final exam for the course within six (6) attempts, must obtain an outside (paid) certificate by the programme year contemplated for their exam in English.

#### Compulsory attendance

Attendance is mandatory.

#### Degree programme final exams

18 credits will be allocated to the Master's degree programme thesis. To be allowed to take the final exam, students must have completed all coursework, passed their exams, and finished all required professional experiences, including the supervised clinical training needed to be admitted into the practice of medicine.

The final exam contemplates the student's defence of an original thesis, written under the tutelage of a tutor, and a co-tutor if desired.

The student's final grade will be based on the average of all marks received during their coursework, the assessment of their thesis at the defence, and the assessment of other educational activities as established by the Academic Coordination Board.

## 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 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 for Erasmus+ mobility for study generally begins around February each year with the publication of a call for applications specifying destinations and requirements. Regarding the Erasmus+ Mobility for Traineeship, the University of Milan usually publishes two calls a year enabling students to choose a destination defined by an interinstitutional agreement or to find a traineeship position on their own.

The University organizes informative meetings to illustrate mobility opportunities and rules for participation.

#### Erasmus+ scholarship

The European Union grants the winners of the Erasmus+ programme selection a scholarship to contribute to their mobility costs, which may be 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

Emergency medical and surgical care (2nd year) (qualifying activity)

General pathology and physiopathology Human physiology years 2 Immunology and immunopathology Medical english

Molecular bases of life

1st COURSE YEAR (disactivated from academic year	<sup>.</sup> 2023/24) Core/compulsory co	urses/a	ctivities
common			
Learning activity		Ects	Sector
Anatomy (1st year)		8	BIO/16
Biology and genetics (1st year)		5	BIO/13
Chemistry and biochemistry	<u>-</u>		BIO/10
Histology and embriology		7	BIO/17
Medical humanities		4	(1) MED/02, (3) M FIL/02
Medical humanities (qualifying activity)		2	MED/09
Medical physics	<u> </u>	6	FIS/07
	Total compulsory credits	44	
2nd COURSE YEAR Core/compulsory courses/activit	ties common		
Learning activity		Ects	Sector
Anatomy (2nd year)		10	BIO/16
Biology and genetics (2 year)		5	(4) MED/03, (1) BIO/13
Clinical medicine 2nd year		1	M-PED/01
Clinical medicine 2nd year (qualifying activity)		1	MED/09
			3.4ED/44

3rd COURSE YEAR (available as of academic year 2024/25) Core/compulsory courses/activities common

Total compulsory credits

1 MED/41 9 MED/04

9 BIO/095 MED/043 L-LIN/12

53

(3) BIO/11, (6) BIO/10

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Learning activity			Sector
		4	(1) M-PSI/01, (3) M- PSI/08
		4	BIO/14
Human pathology (3rd year)		2	MED/08
Human physiology		9	BIO/09
Microbiology		6	MED/07
Semiotics and pathology of systems (qualifying activity)		6	(1) MED/14, (1) MED/10, (1) MED/11, (2) MED/09, (1) MED/18
Semiotics and pathology of systems 1		17	(1) MED/03, (4) MED/14, (4) MED/10, (5) MED/11, (1) MED/09, (1) MED/24, (1) MED/18
Statistics and assessment of evidence in medicine	·	7	MED/01
Statistics and assessment of evidence in medicine (qualifying activity)	_	1	MED/01
	Total compulsory credits	56	

# 4th COURSE YEAR (available as of academic year 2025/26) Core/compulsory courses/activities common

Learning activity	Ects	Sector
	2	M-PSI/08
	6	BIO/14
Dermatologic clinics	3	MED/35
Dermatologic clinics (qualifying activity)	1	MED/35
Diagnostic imagining and radiotherapy	5	MED/36
Diagnostic imagining and radiotherapy (qualifying activity)	3	MED/36
Emergency medical and surgical care (4th year) (qualifying activity)	1	MED/33
Human pathology (4th year)	2	MED/08
Infectious diseases clinical	5	MED/17
Infectious diseases clinical (qualifying activity)	1	MED/17
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)

End of course requirements Final exam  Total compulsory credits	18 18	NA
End of course requirements		
Elective courses		
Total compulsory credits	32	
Surgery: clinics and therapy (6th year) (qualifying activity)		MED/18
Legal medicine Surgery: clinics and therapy (6th year)		MED/43 MED/18
General and specialised pediatrics (qualifying activity)		MED/38 MED/38
General and specialised pediatrics	6	(1) MED/39, (5)
Emergency medical and surgical care (6th year) (qualifying activity)	1	MED/18, (2) MED/41 MED/41
Emergency medical and surgical care	4	(1) MED/09, (1)
Clinical medicine 6th year (qualifying activity) Clinical training - Internal Medicine	2	MED/09 ND
3 ,	3	MED/09
Learning activity		Sector
6th COURSE YEAR (available as of academic year 2027/28) Core/compulsory cou	rses/acti	vities common
Total compulsory credits	/9	
Total compulsory credits	79	MED/18, (1) MED/24
Surgery: clinics and therapy (5th year) (qualifying activity)	3	(1) MED/21, (1)
Psychiatry and behavioral psychology (qualifying activity) Surgery: clinics and therapy (5th year)		MED/25 MED/18
Psychiatry and behavioral psychology	5	(1) M-PSI/08, (4) MED/25
Occupational health	6	MED/44
Laboratory medicine (qualifying activity)	1	MED/05, (2) BIO/12 BIO/12
Laboratory medicine	4	(1) MED/07, (1)
Emergency medical and surgical care (5th year) (qualifying activity) Human pathology (5th year)		MED/11 MED/08
Diseases of the nervous system (qualifying activity)		MED/26
Diseases of the nervous system	7	(1) MED/27, (5) MED/26, (1) MED/34
Clinical training - Neutche  Clinical training - Surgery		ND
Clinical orthopedics and traumatology (qualifying activity) Clinical training - Medicine		MED/33 ND
Clinical orthopedics and traumatology	5	(4) MED/33, (1) MED/34
Clinical obstetrics and gynecology (qualifying activity)		MED/40
Clinical inedicine stri year (quairrying activity)  Clinical obstetrics and gynecology	2	MED/09 MED/40
Clinical medicine 5th year (qualifying activity)	-	MED/06 (1) MED/15, (1)
	13	(1) MED/17, (2)
		(3) MED/04, (1) M-
Learning activity	Ects	Sector
5th COURSE YEAR (available as of academic year 2026/27) Core/compulsory cou	rses/acti	vities common
Total compansory credits	70	
Total compulsory credits	70	MED/16, (1) MED/18
Semiotics and pathology of systems 2 (qualifying activity)	/	MED/15, (2) MED/09, (1)
Samietics and nathelegy of gyptams 2 (qualifying activity)	7	MED/13, (1)
		MED/16, (1) MED/18 (1) MED/12, (1)
		MED/15, (1) MED/09, (3)
		MED/13, (4)

# **COURSE PROGRESSION REQUIREMENTS**

The course contains the following obligatory or advised prerequisites

Learning activity Prescribed foundation courses O/S

Learning activity	Trescribed roundation courses	0/0
Human physiology	Anatomy (2nd year)	Core/compulsory
General pathology and physiopathology	Biology and genetics (2 year)	Core/compulsory
	Molecular bases of life	Core/compulsory
Medical surgical specialties	General pathology and physiopathology	Core/compulsory
Anatomy (2nd year)	Histology and embriology	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	
	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	