

# UNIVERSITA' DEGLI STUDI DI MILANO PROGRAMME DESCRIPTION - ACADEMIC YEAR 2024/25 SINGLE-CYCLE DEGREE

# Medicine and Surgery - Policlinico Hospital Location (Classe LM-41) Enrolled since 2021/22 Academic Year

HEADING	
Degree classification - Denomination	LM-41 Medicine
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:	3rd, 4th
Access procedures:	Cap on student, student selection based on entrance test
Course code:	D51

#### PERSONS/ROLES

# **Head of Interdepartmental Study Programme**

Prof.ssa Maria Lorella Giannì

## **Tutors - Faculty**

Per l'orientamento: prof. Marco Froldi prof.ssa Maria Grazia Rumi

Per la mobilità internazionale e l'Erasmus: prof.ssa Cinzia Bressi

Per stage e tirocini: prof. Giorgio Costantino prof. Andrea Guarneri

Per laboratori ed altre attività: prof.ssa Giovanna Mantovani

#### **Degree Course website**

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

# **Academic Office for the Degree Programme**

Via della Commenda, 19 Phone 02/503.20835 - 20838 - 20826 dal lunedì al venerdì, dalle ore 9.30 alle ore 12.00 e dalle ore 14.00 alle ore 16.00 Email: polodidatticocentrale@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/EEC 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 and 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;

- promoting 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 fulfil the five Dublin descriptors (European Descriptors) with the suggestions provided by the Institute for International Medical Education (IIME) and "The TUNING Project (Medicine) – Learning Outcomes/Competences for Undergraduate Medical Education in Europe". Furthermore, these align perfectly with the guidelines of the "core curriculum" for the Master's degree in Medicine proposed at a national level by the Conference of the 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-to-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:

- a) becoming a National Health Service doctor, or working with a public or state agency (post-graduate degree in medicine required);
- b) research in clinical or pre-clinical practice, as part of a university career, or through work with a research entity (a PhD is recommended);
- c) 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

The degree programme is subject to a national cap on enrolment. Admission into the Master's degree programme in Medicine 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, genetics, 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 (MUR).

Candidates who score at or above twenty (20) points will be included 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 exam. Timely notice of the various programmes will be posted to: https://medicinacentrale.cdl.unimi.it/it

Additional learning requirements (OFA): - English-language proficiency (Level B2):

To be permitted to sit for the English-language exam required for the degree programme, students must demonstrate a Level B2 English-language proficiency under the Common European Framework of Reference for Languages (CFER). 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). The certificate must be uploaded at enrolment, or at some point thereafter, onto the student portal:

http://studente.unimi.it/uploadCertificazioniLingue;

- through a Placement Test, administered by SLAM (University of Milan Language Centre) 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 includes 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.

#### **Campus**

The primary campuses for the Single-cycle Master's degree programme in Medicine - Policlinico Hospital Location, are the Città Studi campus (for the first five semesters of the degree programme) and the Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico (for the remaining seven semesters). For some of the classes required during the first five semesters, students may be divided into two groups, which will be done alphabetically by surname.

The degree programme, for both the academic and the clinical-experience component, may institute additional coursework through university hospitals affiliated with the Faculty of Medicine, as permitted under the University - Lombardy Region guidelines. Decisions regarding new coursework will be made on an annual basis by the Faculty. Students may be assigned, beginning in the first year of the degree programme, to attend courses held at the Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico and the IRCCS Policlinico San Donato Research Hospitals. Thereafter, beginning in the sixth semester, students originally assigned to the Fondazione Ca' Granda Ospedale Maggiore Policlinico may be transferred to the Ospedale San Giuseppe or with another affiliated hospital under the same curriculum. Assignments will be made annually, based on the university hospital's availability, and as the degree programme's needs demand.

# 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 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

Head and Neck - Clinical skills

Infectious Diseases - Clinical skills

Infectious Diseases

1st COURSE YEAR (disactivated from academic year 2023/24) C	Core/compulsory cours	ses/a	ctivities
<b>common</b> Learning activity		Ects	Sector
Leat ming activity		ECG	(1) MED/01, (1)
An Introduction to Medicine			MED/02, (1) MED/43, (1) MED/42
Applied Physics			FIS/07
Biology and genetics		6	(4) BIO/11, (2) BIO/13
Chemistry and introductory biochemistry		7	BIO/10
Histology Human Anatomy		7 18	BIO/17 BIO/16
	Total compulsory credits	48	DIO/10
L	Total compaisory credits		
2nd COURSE YEAR (disactivated from academic year 2024/25)	Core/compulsory cou	rses/a	activities
common			
Learning activity			Sector
Biochemistry			BIO/10 (2) MED/03, (4)
Biology and genetics		6	BIO/13
General Pathology and Physiopathology			MED/04
Human Physiology Immunology and Immunopathology			BIO/09 MED/04
Medical and Surgical Emergency - Clinical skills			MED/04 MED/41
Medical English		3	L-LIN/12
Microbiology			MED/07
Ľ	Total compulsory credits	56	
3rd COURSE YEAR Core/compulsory courses/activities common	1		
Learning activity		Ects	Sector
Clinical Pathology - Clinical Chemistry		4	(1) MED/07, (1)
Clinical Pathology - Clinical skills		1	MED/05, (2) BIO/12 BIO/12
General Pathology and Physiopathology		7	MED/04
Psychology, Healt and Medicine		8	(1) MED/02, (3) M-PSI/01, (3) M-PSI/08 (1) MED/18
Radiology, Nuclear Medicine, and Radiation Therapy		1	
Statistics for Evidence Based Medicine			MED/01
Statistics for Evidence Based Medicine - Clinical skills		1	MED/01 (4) MED/14, (4)
Systems and Diseases I		18	MED/10, (5) MED/11 (1) MED/09, (2) MED/08, (1) MED/24, (1) MED/18
Systems and Diseases I - Clinical skills		6	(1) MED/14, (1) MED/10, (1) MED/11 (2) MED/09, (1) MED/18
	Total compulsory credits	52	
4th COURSE YEAR Core/compulsory courses/activities common			
Learning activity		Ects	Sector
Head and Neck		7	(1) MED/29, (1) MED/28, (2) MED/31, (2)
			MED/30, (1) MED/32 (1) MED/31, (1)

(1) MED/31, (1) MED/30

5 MED/17

1 MED/17

Occupational Medicine	I		MED/44
Pharmacology			MED/44 BIO/14
Radiology, Nuclear Medicine, and Radiation Therapy			MED/36
Radiology, Nuclear Medicine, and Radiation Therapy - Clinical Skills			MED/36
Systems and Diseases II		21	(4) MED/12, (2) MED/03, (4) MED/13, (4) MED/15, (1) MED/09, (3) MED/16, (2) MED/08, (1) MED/18
Systems and Diseases II - Clinical skills		7	(1) MED/12, (1) MED/13, (1) MED/15, (2) MED/09, (1) MED/16, (1) MED/18
	Total compulsory credits	64	
5th COURSE YEAR (available as of academic year 2025/26) Cor	re/compulsory courses	/acti	vities common
Learning activity			Sector
Anatomic Pathology			MED/08
Clinical Psychiatry and Clinical Psychology		5	(1) M-PSI/08, (4)
			MED/25
Clinical Psychiatry and Clinical Psychology - Clinical skills Clinical training - Medicine			MED/25 NN
Clinical training - Medicine  Clinical training - Surgery			NN
Dermatology		3	MED/35
Dermatology - Clinical skills		1	MED/35
General Surgery		6	(1) MED/24, (5) MED/18
General Surgery - Clinical skills		3	(1) MED/24, (2) MED/18
Internal Medicine		8	(1) MED/01, (5) MED/09, (2) MED/06
Internal Medicine - Clinical skills		6	(1) MED/10, (1) MED/11, (4) MED/09
Neurology		7	(1) MED/27, (5) MED/26, (1) MED/34
Neurology - Clinical skills			MED/26
Obstetrics and Gynecology Obstetrics and Gynecology - Clinical skills	-		MED/40 MED/40
Preventive and Public Health Medicine		7	(1) SECS-P/06, (6) MED/42
Trauma and Orthopedic Surgery		5	(4) MED/33, (1) MED/34
Trauma and Orthopedic Surgery - Clinical skills		1	MED/33
	Total compulsory credits	77	
6th COURSE YEAR (available as of academic year 2026/27) Cor	re/compulsory courses	/acti	vities common
Learning activity		Ects	Sector
Clinical training - Internal Medicine			NN
General Surgery		3	(1) MED/21, (2)
General Surgery - Clinical skills		_	MED/18 MED/18
Internal Medicine			MED/18 MED/09
Legal Medicine			MED/43
Medical and Surgical Emergency		4	(1) MED/09, (1) MED/18, (2) MED/41
Medical and Surgical Emergency - Clinical skills		4	(1) MED/09, (1) MED/18, (2) MED/41
Pediatrics		6	(1) MED/39, (5) MED/38
Pediatrics - Clinical skills	Total compulsory gradite	2 37	MED/38
Elective courses	Total compulsory credits	3/	
License courses			
End of course requirements			
Final Exam		18	NN
	Total compulsory credits	18	
COURSE BROCKESSION REQUIREMENTS			

# **COURSE PROGRESSION REQUIREMENTS**

The course contains the following obligatory or advised prerequisites

Learning activity	Prescribed foundation courses	O/S
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General Pathology and Physiopathology	Biology and genetics	Core/compulsory
	Biochemistry	Core/compulsory
Immunology and Immunopathology	Biology and genetics	Core/compulsory

	Biochemistry	Core/compulsory
Systems and Diseases II	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Systems and Diseases I	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Head and Neck	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Anatomic Pathology	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Human Anatomy	Histology	Core/compulsory
Medical and Surgical Emergency	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Pediatrics	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
General Surgery	Systems and Diseases II	Core/compulsory
J- 7	Systems and Diseases I	Core/compulsory
	Anatomic Pathology	Core/compulsory
	Pharmacology	Core/compulsory
	Radiology, Nuclear Medicine, and Radiation Therapy	Core/compulsory
Internal Medicine	Systems and Diseases II	Core/compulsory
	Systems and Diseases I	Core/compulsory
	Anatomic Pathology	Core/compulsory
	Pharmacology	Core/compulsory
	Radiology, Nuclear Medicine, and Radiation Therapy	Core/compulsory
Clinical Psychiatry and Clinical Psychology	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Neurology	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Biochemistry	Chemistry and introductory biochemistry	Core/compulsory
Trauma and Orthopedic Surgery	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Obstetrics and Gynecology	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Infectious Diseases	General Pathology and Physiopathology	Core/compulsory
	Microbiology	Core/compulsory
	Human Physiology	Core/compulsory
Dermatology	General Pathology and Physiopathology	Core/compulsory
	Human Physiology	Core/compulsory
Human Physiology	Human Anatomy	Core/compulsory