UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2020/21
SINGLE-CYCLE DEGREE IN
MEDICINA E CHIRURGIA - (Classe LM-41) International Medical School
Enrolled since 2019/20 Academic Year

HEADING

Degree classification - Denomination and code:	LM-41 Medicine and surgery
Degree title:	Dottore Magistrale
Length of course:	6 years
Total number of credits required to complete programme:	360
Course years currently available:	1° , 2°
Access procedures:	Cap on student numbers,student selection based on entrance test
Course code:	D56

PERSONS/ROLES

Head of Study Programme

Professor Gabriella Cerri

Tutors - Faculty

Academic guidance tutor:
Professor Iacopo Chiodini
Professor Daniela Lucini
Professor Anna Marozzi
Professor Laura Riboni

Dissertation tutor:
Professor Diego Fornasari

University and programme transfer tutor, Credit recognition tutor:
Professor Federico Ambrogi
Professor Matteo Pecchiari
Professor Claudio Colosio

Erasmus and international mobility tutor:
Professor Silvia Della Bella

Degree Course website

https://ims.cdl.unimi.it/en

Didactic segretary:

Email: ims@unimi.it

CHARACTERISTICS OF DEGREE PROGRAMME

Introduction

These regulations apply to the teaching activities and management of the single cycle degree course in Medicine and Surgery known as University of Milan International Medical School (IMS) as part of class LM-41 in the Faculty of Medicine and Surgery at the University of Milan. IMS is based at the LITA-Interdisciplinary Laboratory of Advanced Technologies, in Segrate. The clinical training (years III-IV-V-VI year) is performed in medical centers affiliated with the University of Milan.
The course lasts six years.

General and specific learning objectives

The degree course consists of 360 credits overall, spread over a six-year programme, of which at least 60 must be acquired in training aimed at the acquisition of specific professional abilities. Graduates in the degree courses in Medicine and Surgery must have:

1) acquired the scientific bases and the necessary theorical-practical preparation to Directive 75/363/CEE on the practice of the medical profession;
2) acquired a level of professional awareness, decisional and operative autonomy safety with a deep sensitivity to the complex human problems and social diseases;
3) acquired the theoretical knowledge arising from basic sciences and the ability to properly apply it in the perspective of subsequent professional application;
4) acquired the knowledge of physiopathology and organ and apparatus pathologies, interpreting them in the light of basic scientific knowledge from a clinical point of view;
5) acquired the competence to properly obtain and examine data and elements related to the state of health and illness of an individual;
6) acquired the ability and the experience of facing, and solving, the priority health problems considering the preventive, diagnostic, prognostic, therapeutic and rehabilitative aspects;
7) been exposed to the content and methods of scientific research as a tool to access the clinical field, always in the context of a training translational "from bench-to-bedside" and vice versa;
8) acquired the knowledge of historic, epistemological and ethical dimension of medicine;
9) acquired how to communicate properly and clearly with the patient and his/her relatives relating to them with humanity;
10) learnt how to co-operate with the different professional figures in the various health activities they will be exposed to;
11) learnt how to apply the principles of health economics in medical decisions and acquired the ability to recognise health problems in the community and intervene in a competent manner.

Professional profile and employment opportunities

The professional profile of our graduates is characterized by a sound scientific knowledge of diseases and diagnostic procedures, by a strong ethical structure, accountability, consciousness of his/her own limitations, understanding of culture diversity, capability to solve urgent health problems, and respect for each individual, regardless of his/her religion, values, race, sex or any other peculiarities. They are supposed to mature a strongly integrated approach to the patient, critically assessing the clinical as much as the relational aspects. During the course they acquire the educational, social and ethical aspects involved in the prevention, diagnosis and treatment of illness, as well as the rehabilitation and recovery of the highest possible level of psychophysical well-being. Our graduates are exposed to the content and methods of scientific research in the context of a translational training aimed at leading them in their lifelong learning and/or in their profession of biomedical scientists.
Graduates in the Medicine and Surgery degree courses acquire the professional profile adequate to carry out medical-surgical work in the different professional clinical, health and bio-medical roles and spheres.
The degree in Medicine and Surgery gives access to the State Examination for authorisation to practise as a M.D. Once the examination has been passed, access is given to registration in the relative professional order. In addition, the degree in Medicine and Surgery is a requirement for entry to the Postgraduate Medical Schools or the postgraduate courses for general practitioner.

Pre-requisites for admission

All the degree courses in Medicine and Surgery of the Faculty of Medicine and Surgery of the University of Milan have programmed access and require an admission test. Upon the Law 264 date 2.8.1999, the test is the same for all Italian public universities offering an international medical curriculum, and takes place on the same day at the same time all over the world. The main focus of the admission test is to examine and judge the fundamentals of scientific knowledge and reasoning. The number of students who can be admitted is defined annually by a Decree of the Ministry of Education and Research (MUR), taking account of the training potential declared by the university on the basis of the teaching and clinical resources and structures available, and also the requirements reported by the Lombardy Region and the Ministry of Health. Candidates who have a High School Diploma, or alternative qualification achieved abroad and recognized as suitable, can be admitted to the single cycle degree courses in Medicine and Surgery. Candidates in eligible positions in the ranking of the admission test must enroll according to the procedure of the university.

The admission test (International Medical Admissions Test, IMAT) is designed by Cambridge Assessment in conjunction with the Italian Ministry of Higher Education and Research. The admission test consists of sixty (60) multiple choice questions with five options (of which only one is correct) on the following topics: general knowledge and logical reasoning; biology; chemistry; physics and mathematics.

Programme structure

The course is divided into 12 semesters, with a total of:

1. 274 credits (Ects) delivered with teaching activities to acquire theoretical knowledge with different modalities:
- traditional lectures and seminars;
- interactive teaching (small groups of students co-ordinated by a tutor who facilitates the students in acquiring knowledge, abilities and behavioural models by presenting problem that have to be solved by students through adequate decisions - problem based learning (PBL); clinical cases discussion; journal clubs);
- classroom practical activities and laboratories;
2. 45 Ects delivered with ward activities to acquire practical medical skills;
3. 15 Ects delivered with ward activities (evaluation training 5-6 year) to evaluate the eligibility of students to sit for the post-graduate State Examination mandatory to practice medicine in Italy.

In addition, to be admitted to the final examination, the student must acquire:
- 8 Ects from individually selected activities (Electives);
- 18 Ects for the preparation of the final thesis.

Passage to the following years:
Only those students who have successfully taken the examinations set out in the table below by the end of the session in September are permitted to move from one year of the course to the next:
To enroll in the III year the following exams must have been taken:
- Fundamentals of basic sciences;
- Cells molecules and genes I –II;
- Functions ;
- Human Body.

In order to guarantee a productive learning during the professionalizing activities at the bedside for non-native Italian speaking students, to enroll into the third year of the course it is required a level B2 or higher (Common European Framework of Reference for languages - CEFR) certificate of knowledge of Italian language.
To enroll in the IV year the following exams must have been taken:
- Mechanisms of diseases.

Conscientious objection policy

In compliance with Act No. 413 of October 12, 1993 "Regulations on conscientious objection to animal experimentation", the Faculty of Medicine recognizes the undisputed right to conscientious objection by students. Students may be exonerated from the attendance at laboratory exercises in which testing is scheduled on live or dead animals. The achievement of the scientific and practical knowledge for passing the exams will be granted, in accordance with the educational objectives of the specific degree programs, through substitutive methods suggested by the teachers.

Subjects organisation

a) Lectures and seminars
A lecture is the presentation by the teacher of the course content regarded as fundamental for the acquisition of the basic knowledge in a given discipline. A seminar is similar to a lecture but is jointly conducted by the teacher and lecturers with specific expertise, and it is aimed at introducing the students to medical topics with a broad perspective.
b) Interactive teaching
Interactive teaching activities geared towards a small group of students and co-ordinated by a tutor, with a view to facilitating the students in acquiring knowledge, abilities and behavioural models. Learning mainly takes place through the stimuli from the analysis of problems finalized to their solution through adequate decisions. Interactive learning includes: problem based learning (PBL); clinical cases discussion; journal clubs; practical activities, role playing activities. Interactive teaching takes place also in the clinical wards and laboratories, with the assistance of qualified university or hospital professionals.

Elective training chosen by the Students:
The course provides training for specific optional topics chosen by the student, available throughout the entire course of study. These selected activities offer the student the opportunity to analyse specific or innovative subjects, choosing from a range of suggestions offered each year by the Faculty. Selected activities may be of different types, and attendance is compulsory. This course will privilege elective courses tailored to education to basic research in the first 2 preclinical years and translational research in the following years. The three types of selected activity are configured-as:
1. seminar type courses;
2. internships;
3. participation in conferences and congresses.

Similarly, a fourth type of selected activity can be configured:
4. ‘summer internships’, whose regulation is covered by Art. 8 of the Faculty Regulations on Selected Activities.

The student will mature 1 credit for every three conferences/congresses attended during the chosen course of study for Type 3 activities (attendance at conferences and congresses). The student can acquire a maximum of 1 credit for attending Type 3 activities (attendance at conferences and congresses) during the period of the chosen studies.
The specific regulation of selected activities can be found in the Faculty Regulations on Selected Activities.

Compulsory attendance

The student is required to attend all the teaching activities, with a tolerance of no more than 1/3 of the hours, according to the Regolamento. Students are required to sign their attendance at each learning activities. Should the number of absences be higher than 1/3, the Teaching Committee will take the necessary measures.

Testing and assessment procedures

Each course has a single exam, which is always individual, and the mark will be expressed in thirtieths.
Ongoing tests (prove in itinere) are also performed, exclusively with a view to confirming the effectiveness of the learning and teaching processes in relation to the course content and do not have any official certifying value.

Degree programme final exam

The final test enables 18 training credits to be acquired and focuses on the discussion of an original thesis written by the

student under the guidance of a controlling member of staff (supervisor).

Criteria for admission to degree course final exam

The degree examination focuses on the discussion of an original thesis written in English by the student under the guidance of a controlling member of staff; an assistant supervisor may also be involved.
The student has to have taken all the examinations set out in the study plan and obtained a total of 342 teaching credits to be admitted to the degree examination.
The final marks, out of a total of 110, are decided by:
a. the mark for the presentation in the degree session (average out of 110, based on the marks of the overall curriculum);
b. the score allocated by the degree commission.
The scores allocated to each candidate by the members of the commission are secret. The maximum number of scores that may be allocated by the degree commission is 10, in addition to the average presentation marks. Candidates whose presentation mark is at least 102 can obtain full marks with honors (110 cum Laude), only when proposed and unanimously approved by the commission.

EXPERIENCE OF STUDY ABROAD AS PART OF THE DEGREE 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 30 different 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 International Medical School set up an "Erasmus Desk" dedicated to students interested in both incoming and outgoing international mobility programmes, both within the Erasmus+ projects (Student Exchange and Traineeship Program) and other non-European mobility programmes, or other internships abroad (Free Movers program). The desk (erasmus.ims@unimi.it) is managed by the Erasmus tutor of the course who supports the students in the choice of the mobility programs, welcomes and manages the requests of foreign students interested in organizing a study/internship period in IMS, and assists both incoming and outgoing students in the drafting of learning agreements

How to participate in Erasmus mobility programs

The students of the University of Milan can participate in mobility programmes, which last 3 to 12 months, through a public selection procedure.
Ad hoc commissions will evaluate:
• 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, 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/it/internazionale/studiare-allestero/partire-con-erasmus.

For assistance, please contact:
International Mobility Office
Via Santa Sofia, 9 (second floor)
Tel. 02 503 13501-12589-13495-13502
E-mail: mobility.out@unimi.it
Desk opening hours: Monday to Friday 9 am - 12 noon

ADMISSION CRITERIA: 1ST YEAR CAP ON STUDENT, STUDENT SELECTION BASED ON ENTRANCE TEST

Links to enrolment information and procedures

https://www.unimi.it/it/studiare/frequentare-un-corso-di-laurea/iscriversi/iscriversi-una-prima-laurea

N° of places reserved to non-EU students resident abroad

16

Number of places assigned

34

1° COURSE YEAR Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	Human body (Total number of ects:19)	Histology and embryology	6	BIO/17
		Anatomy	13	(13) BIO/16, (12)
1	Cells, molecules and genes 1 (Total number of ects:7)	Histology and embryology	1	BIO/17
		Biology	2	BIO/13
		Molecular biology	4	BIO/11
1	Fundamentals of basic sciences (Total number of ects:10)	Chemistry and Introductory Biochemistry	6	BIO/10
		Medical Physic	4	FIS/07
2	Cells, molecules and genes 2 (Total number of ects:11)	Biochemistry	5	BIO/10
		Biology	4	BIO/13
		Genetics	2	MED/03
		Total number of compulsory credits/ects	47	

2° COURSE YEAR Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	Functions (Total number of ects:28)	Physiology	16	BIO/09
		Biochemistry	6	BIO/10
		Chemistry and introductory biochemistry	1	BIO/10
		Anatomy	3	BIO/16
		Medical physics	2	FIS/07
	Mechanisms of diseases (Total number of ects:24)	Biochemistry	1	BIO/10
		Genetics	2	MED/03
		General pathology and immunology	15	(15) MED/04, (2)
		Microbiology	6	MED/07
		Total number of compulsory credits/ects	52	

3° COURSE YEAR (To be made available as of academic year 2021/22) Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
1	Bed side approach and clinical methodology (clerkship) (Total number of ects:2)	Internal medicine	1	MED/09
		General surgery	1	MED/18
1	Bed side approach and clinical Methodology_ (Total number of ects:6)	Internal medicine	3	(3) MED/09, (2)
		General surgery	2	MED/18
		General psychology	1	M-PSI/01
1	Pharmacology I		3	BIO/14
1	System diseases 1 (Total number of ects:11)	Cardiovascular diseases	2	MED/11
		Nephrology	4	MED/14
		Pathology	1	MED/08
		Radiology	2	MED/36
		Microbiology	1	MED/07
		Clinical Biochemistry	1	BIO/12
1	System diseases 1 (clerkship) (Total number of ects:3)	Cardiovascular diseases	1	MED/11
		Nephrology	1	MED/14
		Radiology	1	MED/36
2	Biostatistics		5	MED/01
2	Health informatics		3	INF/01
2	System diseases 2 (Total number of ects:12)	Blood diseases	4	MED/15
		Respiratory diseases	4	MED/10
		Pathology	1	MED/08
		Radiology	1	MED/36
		Microbiology	1	MED/07
		Clinical biochemistry	1	BIO/12
2	System diseases 2 (clerkship) (Total number of ects:4)	Respiratory diseases	1	MED/10
		Blood diseases	2	MED/15
		Radiology	1	MED/36
		Total number of compulsory credits/ects	49	

4° COURSE YEAR (To be made available as of academic year 2022/23) Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
1	Dermatology		3	MED/35
1	Dermatology (clerkship)		1	MED/35
1	Infectious diseases (Total number of ects:6)	Infectious diseases	5	MED/17
		Pharmacology	1	BIO/14
1	Infectious Diseases (clerkship)		1	MED/17
1	Pharmacology II		3	BIO/14
1	System diseases 3 (Total number of ects:14)	Gastroenterology	4	MED/12
		Endocrinology	4	(4) MED/13, (3)
		Pathology	2	MED/08
		Radiology	2	MED/36
		Microbiology	1	MED/07
		Clinical Biochemistry	1	BIO/12
1	System diseases 3 (clerkship) (Total number of ects:5)	Pathology	1	MED/08
		Gastroenterology	2	MED/12
		Endocrinology	1	MED/13
		Radiology	1	MED/36
2	Bone and joint diseases (Total number of ects:7)	Reumathology	2	MED/16
		Orthopedics	4	MED/33
		Rehabilitation medicine	1	MED/34
2	Bone and joint diseases (clerkship) (Total number of ects:2)	Orthopedics	1	MED/33
		Rheumatology	1	MED/16
2	Clinical and surgical pathology		4	MED/08
2	Clinical oncology and radiotherapy (Total number of ects:7)	Medical oncology	3	MED/06
		Radiology and radiotherapy	1	MED/36
		Pharmacology	1	BIO/14
		General psychology	1	M-PSI/01
		Pathology	1	MED/08
2	Clinical oncology and radiotherapy (clerkship) (Total number of ects:3)	Medical oncology	2	MED/06
		Radiology and radiotherapy	1	MED/36
2	Head and neck (Total number of ects:9)	Odontostomatological diseases	2	MED/28
		Ophthalmology	2	MED/30
		Otorhinolaryngology	2	MED/31
		Human physiology	1	BIO/09
		Anatomy	1	BIO/16
		Maxillofacial surgery	1	MED/29
2	Head and neck (clerkship) (Total number of ects:3)	Otorhinolaryngological diseases	1	MED/31
		Odontostomatological diseases	1	MED/28
		Ophtalmological diseases	1	MED/30
		Total number of compulsory credits/ects	68	

5° COURSE YEAR (To be made available as of academic year 2023/24) Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	Clinical practice 5th year (Total number of ects:18)	Pharmacology	1	BIO/14
		Clinical pathology	2	(2) MED/05, (1)
		Internal medicine	7	MED/09
		General surgery	5	MED/18
		Plastic surgery	1	MED/19
		Thoracic surgery	1	MED/21
		Urology	1	MED/24
	Clinical practice 5th year (clerkship) (Total number of ects:5)	Internal medicine	1	MED/09
		Thoracic surgery	1	MED/21
		Urology	1	MED/24
		General surgery	2	MED/18
	Evaluation internship - Medical sciences		5	
	Evaluation internship - Surgical sciences		5	
1	Neurobiology, human behaviour and clinical neuroscience (Total number of ects:19)	Neurology	5	MED/26
		Anatomy	1	BIO/16
		Human physiology	1	BIO/09
		Neurosurgery	1	MED/27
		Pharmacology	1	BIO/14
		General Psychology	1	M-PSI/01
		Clinical Psychology	1	M-PSI/08
		Infant neuropsychiatry	1	MED/39
		Phatology	1	MED/08
		Mental health	4	MED/25
		Radiolology	1	MED/36
		Rehabilitation medicine	1	MED/34
1	Neurobiology, human behaviour and clinical neuroscience (clerkship) (Total number of ects:2)	Mental health	1	MED/25
		Neurology	1	MED/26
1	Traslational cardiovascular medicine and surgery (Total number of ects:4)	Cardiovascular diseases	2	MED/11
		Cardiac surgery	1	MED/23
		Vascular surgery	1	MED/22
1	Traslational cardiovascular medicine and surgery (clerkship) (Total number of ects:3)	Cardiovascular diseases	1	MED/11
		Cardiac surgery	1	MED/23

		Vascular surgery	1	MED/22
2	Obstetrics, gynecology and pediatrics (Total number of ects:10)	Obstetrics, gynecology	5	MED/40
		Pediatrics	5	MED/38
2	Obstetrics, gynecology and pediatrics (clerkship) (Total number of ects:2)	Pediatrics	1	MED/38
		Obstetrics, gynecology	1	MED/40
2	Public health and environmental medicine (Total number of ects:9)	General and applied hygiene	4	(4) MED/42, (1)
		Occupational medicine	4	(4) MED/44, (1)
		Applied economics	1	SECS-P/06
2	Public health and environmental medicine (clerkship)		1	MED/44
		Total number of compulsory credits/ects	83	

6° COURSE YEAR (To be made available as of academic year 2024/25) Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	Evaluation internship - General practice		5	
1	Clinical practice 6th year (Total number of ects:10)	Internal medicine	4	(4) MED/09, (1)
		General surgery	3	MED/18
		Medical statistic	2	MED/01
		General psychology	1	M-PSI/01
1	Clinical practice 6th year (clerkship) (Total number of ects:2)	Internal medicine	1	MED/09
		General surgery	1	MED/18
1	Emergencies (Total number of ects:8)	Internal medicine	2	(2) MED/09, (1)
		General surgery	2	MED/18
		Anesthesiology	4	MED/41
1	Emergencies (clerkship)_ (Total number of ects:6)	Respiratory diseases	1	MED/10
		Cardiovascular diseases	1	MED/11
		Neurology	1	MED/26
		Neurosurgery	1	MED/27
		Orthopedics	1	MED/33
		Anesthesiology	1	MED/41
1	Forensic medicine (Total number of ects:4)	Forensic medicine	3	MED/43
		Occupational medicine	1	MED/44
		Total number of compulsory credits/ects	35	

Further electives

By the end of 6 years students should acquire 8 credits in elective activities.

End of course requirements

	Final examination		18	
		Total number of compulsory credits/ects	18	

COURSE PROGRESSION REQUIREMENTS

Degree programme course progression is subject to the follopwing compulsory or recommended pre-requisites

Learning activity / course	Prescribed foundation courses	
Cells, molecules and genes 2	Fundamentals of basic sciences	Core /compulsory
	Cells, molecules and genes 1	Core /compulsory
Clinical practice 6th year	Pharmacology I	Core /compulsory
	System diseases 1	Core /compulsory
	System diseases 2	Core /compulsory
	System diseases 3	Core /compulsory
	Pharmacology II	Core /compulsory
	Neurobiology, human behaviour and clinical neuroscience	Core /compulsory
	Clinical and surgical pathology	Core /compulsory
Emergencies	Pharmacology I	Core /compulsory
	System diseases 1	Core /compulsory
	System diseases 2	Core /compulsory
	System diseases 3	Core /compulsory
	Pharmacology II	Core /compulsory
	Neurobiology, human behaviour and clinical neuroscience	Core /compulsory
	Clinical and surgical pathology	Core /compulsory
Functions	Cells, molecules and genes 2	Core /compulsory
	Fundamentals of basic sciences	Core /compulsory
	Human body	Core /compulsory
	Cells, molecules and genes 1	Core /compulsory
Mechanisms of diseases	Cells, molecules and genes 2	Core /compulsory

	Fundamentals of basic sciences	Core /compulsory
	Human body	Core /compulsory
	Cells, molecules and genes 1	Core /compulsory
System diseases 1	Mechanisms of diseases	Core /compulsory
System diseases 2	Mechanisms of diseases	Core /compulsory
System diseases 3	Mechanisms of diseases	Core /compulsory

VALIDATION OF ECTS ACQUIRED IN OTHER/PREVIOUS DEGREE PROGRAMMES/ THROUGH PROFESSIONAL EXPERIENCE

Validation

The studies carried out at other courses in the State university of Milan and in other universities, and the credits awarded as their result, will be acknowledged by the Faculty on the proposal of the Teaching Co-ordination Committee (TCC) for Medicine and Surgery, which may set up an ad hoc commission. If the criteria for progression from one year to another have been satisfied, the commission will indicate the examinations confirmed and the course year to which the student may be admitted. Enrolment in a specific year of the course is, in any case, subject to the availability of positions, on the basis of the maximum number of students scheduled for admission by the Faculty.

Time limits for credit validation

The Ects acquired for each exam expire 10 years after its acquisition, and require confirmation and validation.