



UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2018/19
SINGLE-CYCLE DEGREE IN
MEDICINA E CHIRURGIA - (Classe LM-41) International Medical
School
Immatricolati per l'aa 2013/2014

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:	6°
Access procedures:	Cap on student numbers, student selection based on entrance test
Course code:	D56

PERSONS/ROLES

Head of Study Programme

Prof. Raffaello Furlan

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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' set up at the Istituto Clinico Humanitas (CLM) as part of class LM-41 in the Faculty of Medicine and Surgery at 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:

The scientific bases and the necessary theoretical-practical preparation to Directive 75/363/CEE on the practice of the medical profession.

A level of professional, decisional and operative autonomy arising from a training path featuring a holistic approach to health problems of healthy and ill people;

To know the essential theoretical knowledge arising from basic sciences and to apply in the perspective of subsequent professional application;

To be able to find and critically assess data relating to the state of health and illness of an individual;

To know the physiopathology and organ and apparatus pathologies, interpreting them in the light of basic scientific knowledge from clinical point of view;

To have the capability and the experience, joined with self-assessment ability, of facing and solving the priority health problems responsibility from the preventive, diagnostic, prognostic, therapeutic and rehabilitative points of view are required;

To have the knowledge of historic, epistemological and ethical dimension of medicine;

To communicate with the patient and his/her relatives clearly and with humanity;

To co-operate with the different professional figures in the various group health activities;

To apply the principles of health economics in medical decisions and the ability to recognise health problems in the community and intervene in a competent manner are essential part of the student learning path.

Expected learning outcomes

The professional profile of graduates is characterized by a sound scientific knowledge of diseases and diagnostic procedures, by a strong ethical structure, accountability, consciousness of own's 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 have matured a strongly integrated approach to the patient, critically assessing not only the clinical aspects but also paying special attention to the relational, educational, social and ethical aspects involved in the prevention, diagnosis and treatment of illness, as well as the rehabilitation and recovery of the highest level of psychophysical well-being possible. Graduates in the Medicine and Surgery degree courses will carry out medical-surgical work in the different professional clinical, health and bio-medical roles and spheres.

Professional profile and employment opportunities

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.

Programme structure

The planned length of the single cycle degree course in Medicine and Surgery is six years, divided into 12 semesters, during which a total of 274 credits (CFU, University Formative Credits) will be distributed during traditional lessons, training work in small groups, classroom exercises, laboratories, and seminars, and distance training; 60 credits will be obtained from professionalising activities and 8 credits from individually selected activities. Also 18 CFU are accredited 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 will be permitted to move from one year of the course to the next:

To enroll the III year the following exams must have been taken:

- Human body
- From Atoms to cells
- Functions

To enroll 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 of 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. As the learning also takes place through other interactive teaching methods, the number of hours in lectures and other formal lessons is lower than in traditional medical degree courses.

A seminar is similar to a lecture but is conducted by a number of teachers with different skills, and annotated as such in the register of the lessons taught by each of them.

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

Also, interactive teaching takes place in the clinical wards and laboratories, with the assistance of qualified university or hospital professionals.

c) Distance Learning (FAD)

The Faculty may make use of audio-visual technologies, installed in specially equipped rooms, for some courses. The special rooms enable students to follow the lecturer 'live' even though he may be in another centre. The audio-visual equipment allows the lecturer and students to interact during the lesson.

d) The international Medical School curriculum also includes a variety of learning /teaching on the field

ELECTIVE TRAINING CHOSEN BY THE STUDENTS

The course provides for training work chosen by the student, distributed 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 must be attended. The three types of selected activity are configured:

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.

At the end of the attendance of the Selected Activity (elective) students who have at least 75% of attendance will receive a certificate and the credits.

The specific regulation of selected activities can be found in the Faculty Regulations on Selected Activities.

The student is required to attend all the teaching activities, with a tolerance of no more than 20% of the hours. Students are required to sign their attendance at each learning activities. Should the number of absences be higher than 25%, the Teaching Committee will take the necessary measures.

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 in question.

These tests have no 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),
- b. the marks allocated by the degree commission.

The marks allocated to each candidate by the members of the commission are secret. The maximum number of marks that may be allocated by the degree commission is 10, in addition to the average presentation marks. Only candidates whose presentation mark is at least 102 can obtain the maximum total marks (110), and this is subject to confirmation of the results he has achieved and the unanimous approval of the commission.

Study and internships abroad

Students who take advantage of the European Union mobility programmes are permitted to attend a foreign university for a maximum of two semesters, from the second year of the course onwards. In accordance with the procedures in force, students who intend to take advantage of this opportunity are required to present an application to the course commission which describes the work they wish to do at the foreign university (learning agreement). The procedures and criteria set out by the Faculty and University will apply for the assessment and approval of applications.

Training carried out abroad as part of the European Union mobility programmes for students and the credits applicable to them are fully or partially acknowledged for the award of the degree, as set out in the European Credit Transfer System (ECTS).

Students can apply for the recognition of the period of study abroad as a selected activity, as set out by the Faculty Regulations. Students are exonerated from the requirement to attend the teaching activities of the degree course during the periods abroad, duly authorised in accordance with this article.

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

Application and enrolment information and procedures

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. Pursuant to Law 264 date 2.8.1999, the test is the same for all Italian public universities and takes place on the same day at the same time; however, the classification is drawn up for each university. To enter medical school in Italy all citizens have to pass an admission test. The number of students who can be admitted is defined annually by a Decree of the Ministry of Education and Research (MIUR), 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 shown by the Lombardy Region and the competent Ministry referring to the requirement for medical staff with the reference professional profile. Candidates who have a High School Diploma or alternative qualification achieved abroad and recognised as suitable can be admitted to the single cycle degree courses in Medicine and Surgery. Candidates in an appropriate position in the classification of the admission test must complete registration through the on-line SIFA terminal and lodge the relative application for enrolment within the terms set out by the Notice of Competition, at the Secretary for Faculty of Medicine and Surgery Students, Via Santa Sofia 9/1, Milan

Practical instructions

The admission test consists of a written test based on multiple-choice questions, according to a special program provided by the MIUR. The admission test shall be in English and shall include 80 questions on topics such as biology, chemistry, physics and reasoning. The test will take place on a national level on a date to be established by the MIUR

1° COURSE YEAR (Cancelled since academic year2014/15)Core/compulsory courses/activities				
Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	From Atoms to cells (Total number of ects:25)	Biochemistry	12	BIO/10
		Biology	5	BIO/13
		Genetics	2	MED/03
		Molecular Biology	3	BIO/11
		Medical Physics	3	FIS/07
	Human Body (Total number of ects:20)	Histology and embryology	7	BIO/17
		Anatomy	13	BIO/16
	Introduction to Medical Profession (Total number of ects:4)	Internal Medicine	1	MED/09
		General pedagogy	1	M-PED/01
		Occupational Medicine	1	MED/44
		Hystory of medicine	1	MED/02
		Total number of compulsory credits/ects	49	
2° COURSE YEAR (Cancelled since academic year2015/16)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
		Anatomy	3	BIO/16
		Medical physics	3	FIS/07
	Mechanisms of diseases (Total number of ects:23)	General pathology and immunology	14	(14) MED/04, (12)
		Microbiology	6	MED/07
		Biochemistry	1	BIO/10
		Molecular Biology	1	BIO/11
		Technical sciences for laboratory medicine	1	MED/46
		Total number of compulsory credits/ects	51	
3° COURSE YEAR (Cancelled since academic year2016/17)Core/compulsory courses/activities				
Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	Signs, symptoms and communication (clerkship) (Total number of ects:3)	General surgery	1	MED/18
		Internal medicine	1	MED/09
		Clinical psychology	1	M-PSI/08
	Signs,symptoms and communication (Total number of ects:8)	Internal Medicine	3	(3) MED/09, (2)
		General Surgery	2	MED/18
		Clinical Psychology	3	(3) M- PSI/08, (1)
	Biostatistics		6	MED/01
	Head and Neck (Total number of ects:9)	Functions	1	BIO/09
		Anatomy	1	BIO/16
		Dental medicine	2	MED/28
		Ophthalmology	2	MED/30
		Otorhinolaryngology	2	MED/31
		Maxillofacial surgery	1	MED/29
	Head and Neck (clerkship) (Total number of ects:3)	Otorhinolaryngological diseases	1	MED/31
		Odontostomatological diseases	1	MED/28
		Ophtalmological diseases	1	MED/30
	System Diseases 1 (Total number of ects:15)	cardiovascular diseases	4	MED/11
		Nephrology	4	MED/14
		Pathology	2	MED/08
		Radiology	1	MED/36
		Microbiology	1	MED/07

		Urology	1	MED/24
		Medical and applied technical sciences	1	MED/50
		Clinical Biochemistry	1	BIO/12
	System diseases 1 (clerkship) (Total number of ects:8)	Nephrology	2	MED/14
		Cardiovascular diseases	2	MED/11
		Urology	1	MED/24
		Vascular surgery	1	MED/22
		Cardiac surgery	1	MED/23
		Clinical biochemistry	1	BIO/12
	ICT for Medicine		3	INF/01
	System Diseases 2 (Total number of ects:13)	Radiology	1	MED/36
		Blood diseases	4	MED/15
		Pathology	2	MED/08
		respiratory diseases	4	MED/10
		Microbiology	1	MED/07
		Clinical Biochemistry	1	BIO/12
	System diseases 2 (clerkship) (Total number of ects:5)	Respiratory diseases	2	MED/10
		Blood diseases	2	MED/15
		Thoracic surgery	1	MED/21
		Total number of compulsory credits/ects	73	

4° COURSE YEAR (Cancelled since academic year2017/18)Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	Bone and Joint Diseases (Total number of ects:7)	Reumatology	2	MED/16
		orthopedics	4	MED/33
		Rehabilitation Medicine	1	MED/34
	Dermatology		3	MED/35
	Dermatology (clerkship)		1	MED/35
	Pathology (clerkship)		1	MED/08
	System Diseases 3 (Total number of ects:13)	Radiology	1	MED/36
		Gastroenterology	4	MED/12
		Endocrinology	4	MED/13
		Pathology	2	MED/08
		Microbiology	1	MED/07
		Clinical Biochemistry	1	BIO/12
	System diseases 3 (clerkship) (Total number of ects:5)	Gastroenterology	3	MED/12
		Endocrinology	2	MED/13
	Imaging		4	MED/36
	Imaging (clerkship)		2	MED/36
	Infectious Diseases		5	MED/17
	Pathology		4	MED/08
	Pharmacology		10	BIO/14
		Total number of compulsory credits/ects	55	

5° COURSE YEAR (Cancelled since academic year2018/19)Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	Patient management (clerkship) (Total number of ects:10)	Internal medicine	5	MED/09
		General surgery	5	MED/18
	Patient Management 5th year (Total number of ects:18)	Internal medicine	6	MED/09
		General surgery	4	MED/18
		Plastic surgery	1	MED/19
		Rehabilitation Medicine	1	MED/34
		Cardiac surgery	1	MED/23
		Nursing	1	MED/45
		Medical genetics	2	MED/03
		Clinical psychology	1	M-PSI/08
		Clinical pathology	1	MED/05
	Bone and Joint Diseases (clerkship) (Total number of ects:5)	Orthopedics	3	MED/33
		Rheumatology	2	MED/16
	Clinical neuroscience (Total number of ects:8)	Neurology	5	MED/26
		Anatomy	1	BIO/16
		Human Physiology	1	BIO/09
		Neurosurgery	1	MED/27
	Clinical neuroscience (clerkship)		2	MED/26
	Mental Health		4	MED/25
	Mental health (clerkship)		1	MED/25
	Clinical Oncology and Radiotherapy (Total number of ects:4)	Medical oncology	3	MED/06
		Radiology and radiotherapy	1	MED/36
	Clinical Oncology and Radiotherapy (clerkship) (Total number of ects:4)	Medical oncology	3	MED/06
		Radiology and radiotherapy	1	MED/36
	Obstetrics and Gynecology		5	MED/40
	Obstetrics and gynecology (clerkship)		2	MED/40
	Pediatrics (Total number of ects:6)	Pediatrics	5	MED/38
		Infant Neuropsychiatry	1	MED/39
	Pediatrics (clerkship)		2	MED/38
	Public Health and environmental medicine (Total number of ects:12)	Occupational Medicine	5	MED/44
		Hygiene	6	MED/42
		applied economics	1	SECS-P/06
	Public health and environmental medicine (clerkship)		1	MED/44
		Total number of compulsory credits/ects	84	

6° COURSE YEAR Core/compulsory courses/activities				
Scheduling	Learning activity	Module/teaching unit	Ects	Sector
1	Emergencies (Total number of ects:5)	General Surgery	2	MED/18
		Internal Medicine	1	MED/09
		Anesthesiology	2	MED/41
1	Emergencies (clerkship) (Total number of ects:5)	Anesthesiology	1	MED/41
		Neurology	1	MED/26
		Neurosurgery	1	MED/27
		Cardiovascular diseases	1	MED/11
		Orthopedics	1	MED/33
1	Forensic Medicine		3	MED/43
1	Patient Management 6th year (Total number of ects:9)	Internal Medicine	5	(5) MED/09, (1)
		General Surgery	4	MED/18
		Total number of compulsory credits/ects	22	
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 following compulsory or recommended pre-requisites

Learning activity / course	Prescribed foundation courses	
Emergencies	System Diseases 1	Core /compulsory
	System Diseases 2	Core /compulsory
	System Diseases 3	Core /compulsory
	Clinical neuroscience	Core /compulsory
	Pathology	Core /compulsory
	Pharmacology	Core /compulsory
	Imaging	Core /compulsory
Functions	From Atoms to cells	Core /compulsory
	Human Body	Core /compulsory
Mechanisms of diseases	Functions	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 university and 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 progress 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 places, on the basis of the maximum number of students scheduled for admission by the Faculty.

Time limits for credit validation

Following each exam successfully passed, the Student shall be credited of the pertinent CFU.

The validity of the CFU is submitted to a confirmation and validation 10 years after its acquisition