



**UNIVERSITA' DEGLI STUDI DI MILANO**  
**PROGRAMME DESCRIPTION - ACADEMIC YEAR 2022/23**  
**IN**  
**MEDICINA E CHIRURGIA - (Classe LM-41) International Medical**  
**School**  
**Enrolled since 2022/23 Academic Year**

### **HEADING**

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

### **PERSONS/ROLES**

#### **Head of Study Programme**

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Erasmus and international mobility tutor:

Prof. Silvia Della Bella – [erasmus.ims@unimi.it](mailto:erasmus.ims@unimi.it)

#### **Degree Course website**

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

#### **Didactic secretary:**

Email: [ims@unimi.it](mailto: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 at ASST Grande Ospedale Metropolitano Niguarda, as IMS reference hospital, and in other 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 theoretical-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) learn how to apply the principles of health economics in medical decisions and acquired the ability to recognize 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 achievement of the IMS degree enables to practice as a physician (Legislative Decree 17-3-2020, n.18, Art.102) and to register in the Italian medical register, upon acquisition of a positive evaluation in the Evaluation Training Internship, as referred to Art.3 of the Decree of the Ministry of Education, University and research (MUR) 9-5-2018, n.58. Graduates can pursue a medical career in a wide range of clinical, healthcare and bio-medical roles and domains. IMS degree is a prerequisite for entering medical Residencies programs, the School of General Medicine (upon National Admission test) and/or PhD programs (upon Universities Admission test).

### **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.

#### **Additional Formative Obligations (OFA)**

Students admitted with a total score of less than 45/90 and who have achieved a score of less than 11,25/22,5 for the questions evaluating the knowledge of Biology, will be assigned additional educational obligations (OFA). These obligations consist in on purpose activities. Failure to pass the OFA will not allow to take the examination of Cells, Molecules and Genes 1. Details on OFA will be advertised on the website: <https://ims.cdl.unimi.it/en>.

#### **Lecture Planning**

Academic Calendar of teaching activities:

- first semester courses are scheduled from mid-September through the end of January, for all years except the 1st year course, usually beginning mid-October;

- the courses of the second semester are scheduled from the first week of March to half June.

The schedules of classes and non-formal activities (exercises, professionalizing activities, etc.) are published on the IMS website:

### **Programme structure**

The course of study provides a plurality of learning activities to expose the student to all possible aspects of medical professionalism. To this aim students attend a Common Track lasting from 1st to the 6th year. At the end of the first semester of the 5th year, students will choose 1 among 10 different multidisciplinary courses (Final Track) designed to provide students an in-depth study of the most relevant health topics. By choosing 1 out of the 10 Final Tracks, the student will be exposed to topics fitting with his/her interest and will acquire a background knowledge to orient themselves in choice of their career and their professional figure, suited to their cultural and personal interests and attitudes.

The course, divided into 12 semesters, delivers 360 CFU:

1) 274 CFU teaching activities scheduled as follows:

- 264 CFU Common Track;
- 10 CFU Final Track.

Theoretical knowledge will be acquired with different modalities:

- traditional lectures and seminars;
- interactive teaching (small groups of students supervised by a tutor supporting students in acquiring knowledge, abilities and behavioral 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) 60 CFU ward activities to practice medical skills scheduled as follows:

- 41 CFU: Common Track ward training activities practical medical skills;
- 4 CFU: Final Track ward training activities practical medical skills related to the main topics of the chosen Track.
- 15 CFU: evaluation internships (5th-6th year) subdivided in: 5CFU in Surgery Area, 5CFU Medical Area, 5CFU General medicine area. Positive evaluation is needed to be admitted to graduation and to practice as Physicians.

3) 8 CFU: individually selected activities (Electives) scheduled as follows;

- 5 CFU Common Track Electives
- 3 CFU Final Track Electives.

4) 18 CFU: 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 biomedical Imaging basic sciences;
- Functions I –II.

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.

To enroll in the V year the following exams must have been taken:

- Fundamentals of clinical medicine 1-2-3
- Fundamental Pharmacology and therapeutics

### **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**

Both synchronous and asynchronous modalities will be adopted during the course.

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.

#### Language test / computer literacy test

The candidate students should be aware that even though knowledge of the Italian language is not a prerequisite for matriculation to IMS, a good level of knowledge of Italian language (level B2 or higher - CEFR) is required to access the clinical activities at the third year of the programme.

This level can be assessed by the end of the second year in the following ways:

- by submitting a language certificate achieved no more than three years prior to the submission, at level B2 or higher, recognised by the University (the list of recognised language certificates can be found at: <https://www.unimi.it/en/node/349/>). The language certificate must be submitted through Informastudenti (<https://informastudenti.unimi.it/saw/ess?AUTH=SAML>), by choosing the category 'Language test';
- by an entry-level test, organised by SLAM, to be taken at the beginning of the first year of study.

Students who attain B2 level through a certificate or the entry-level test access the clinical activities at the third year of the programme.

Students who fail to reach level B2 will have to attend one or more 80-hour Italian language courses (based on their starting level) organised by SLAM and to reach the B2 level by passing the end-of-course test by the end of the second year of study.

#### 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.

<https://ims.cdl.unimi.it/en/study/exams>

#### 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.

#### Lecture timetable

<https://ims.cdl.unimi.it/en/study/course-timetable>

## **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 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**

During the Degree course, students can participate to study and internship experiences abroad within the Erasmus + Programme. Students can apply for the recognition of the periods of study abroad as Electives.

### **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 inter-institutional 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](mailto:mobility.out@unimi.it)

Student Desk booking through InformaStudenti

## **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/iscrivarsi/iscrivarsi-una-prima-laurea>

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

25

### **Notes**

Number of place for EU students admitted by University of Milan: 45

### **INTRODUCTION:**

All IMS students will attend all the Core/Compulsory curriculum courses scheduled from the 1st semester of the 1st year to the 1st semester of the 6th year. During the 2nd semestre fo the 5th year students will chose a multidisciplinary course, the final TRACK, among the 10 options (Tracks from 1 to 10) offered by the IMS school and listed in the Table below. The

formal learning activities related to each Track are scheduled in the 1st semester of the 6th year while the track-related clerkships and elective activities are scheduled in the 2nd semester of the 6th year to allow students to perform these activities abroad (exchanges programs).

<b>1° COURSE YEAR Core/compulsory courses/activities</b>				
<b>Scheduling</b>	<b>Learning activity</b>	<b>Module/teaching unit</b>	<b>Ects</b>	<b>Sector</b>
1 semester	Cells, molecules and genes (Total number of ects:6)	Molecular biology	4	BIO/11
		Biology	2	BIO/13
1 semester	Fundamentals_of_basic_sciences (Total number of ects:12)	Chemistry and introductory biochemistry	7	BIO/10
		Medical physic	5	FIS/07
1 semester	Histology		7	BIO/17
2 semester	Anatomy		12	BIO/16
2 semester	Biochemistry		6	BIO/10
2 semester	Fundamentals of biomedical imaging (Total number of ects:3)	Medical Physic	2	FIS/07
		Radiology and radiotherapy	1	MED/36
		Total number of compulsory credits/ects	46	
<b>2° COURSE YEAR (available as of academic year 2023/24) Core/compulsory courses/activities</b>				
<b>Scheduling</b>	<b>Learning activity</b>	<b>Module/teaching unit</b>	<b>Ects</b>	<b>Sector</b>
1 semester	Functions 1 (Total number of ects:15)	Physiology	9	BIO/09
		Biochemistry	6	BIO/10
1 semester	Genetics (Total number of ects:8)	Biology	4	BIO/13
		Genetics	4	MED/03
1 semester	Microbiology		4	MED/07
2 semester	Functions 2 (Total number of ects:12)	Physiology	8	BIO/09
		Anatomy	4	BIO/16
2 semester	Mechanisms_of_diseases		14	MED/04
		Total number of compulsory credits/ects	53	
<b>3° COURSE YEAR (available as of academic year 2024/25) Core/compulsory courses/activities</b>				
<b>Scheduling</b>	<b>Learning activity</b>	<b>Module/teaching unit</b>	<b>Ects</b>	<b>Sector</b>
1 semester	Foundational pharmacological principles		3	BIO/14
1 semester	Fundamentals of clinical medicine 1 (Total number of ects:13)	Internal medicine	2	MED/09
		Respiratory diseases	3	MED/10
		Cardiovascular diseases	3	MED/11
		Nephrology	3	MED/14
		General surgery	2	MED/18
1 semester	Fundamentals of clinical medicine 1 (Clerkship) (Total number of ects:5)	General surgery	1	MED/18
		Internal medicine	1	MED/09
		Respiratory diseases	1	MED/10
		Cardiovascular diseases	1	MED/11
		Nephrology	1	MED/14
1 semester	Fundamentals of clinical medicine 2 (Total number of ects:6)	Internal medicine	2	MED/09
		Reumatology	2	MED/16
		Blood diseases	2	MED/15
1 semester	Fundamentals of clinical medicine 2 (Clerkship)		1	MED/16
1 semester	Translational medicine and biotechnologies 1 (Total number of ects:9)	Informatics	2	INF/01
		Molecular biology	1	BIO/11
		Clinical Biochemistry	2	BIO/12
		Microbiology	2	MED/07
		Laboratory medicine	2	MED/46
2 semester	Biostatistics		5	MED/01
2 semester	Fundamentals of clinical medicine 3 (Total number of ects:11)	Gastroenterology	3	MED/12
		Endocrinology	3	MED/13
		Dermatology	3	MED/35
		Fiscal training sciences and methodology	2	M-EDF/01
2 semester	Fundamentals of clinical medicine 3 (Clerkship) (Total number of ects:3)	Gastroenterology	1	MED/12
		Endocrinology	1	MED/13
		Dermatology	1	MED/35
		Total number of compulsory credits/ects	56	
<b>4° COURSE YEAR (available as of academic year 2025/26) Core/compulsory courses/activities</b>				
<b>Scheduling</b>	<b>Learning activity</b>	<b>Module/teaching unit</b>	<b>Ects</b>	<b>Sector</b>
1 semester	Clinical and surgical pathology (Clerkship)		1	MED/08
1 semester	Clinical oncology emato-oncology and radiotherapy (Clerkship) (Total number of ects:2)	Medical oncology	1	MED/06
		Blood diseases	1	MED/15
1 semester	Clinical oncology, emato-oncology and radiotherapy (Total number of ects:7)	Pharmacology	1	BIO/14
		Medical oncology	3	MED/06
		Pathology	1	MED/08
		Blood diseases	1	MED/15
		Radiology and radiotherapy	1	MED/36
1 semester	Head and neck_(Clerkship) (Total number of ects:2)	Ophthalmology	1	MED/30
		Otorhinolaryngology	1	MED/31
1 semester	Head_and_Neck (Total number of ects:8)	Human physiology	1	BIO/09
		Anatomy	1	BIO/16

		Odontostomatological diseases	2	MED/28
		Ophthalmology	2	MED/30
		Otorhinolaryngology	2	MED/31
1 semester	Infectious diseases (Total number of ects:6)	Infectious diseases	5	MED/17
		Pharmacology	1	BIO/14
1 semester	Infectious Diseases (clerkship)		1	MED/17
1 semester	Orthopedics, traumatology and rehabilitation (Total number of ects:5)	Orthopedics	4	MED/33
		Rehabilitation medicine	1	MED/34
1 semester	Orthopedics, traumatology and rehabilitation (Clerkship)		1	MED/33
2 semester	Clinical imaging		4	MED/36
2 semester	Clinical imaging (Clerkship)		1	MED/36
2 semester	Clinical and surgical pathology		7	MED/08
2 semester	Fundamental pharmacology and therapeutics		3	BIO/14
2 semester	Medical psychology (Total number of ects:6)	General psychology	3	M-PSI/01
		Psychobiology and physiologic psychology	1	M-PSI/02
		Social psychology	1	M-PSI/05
		Clinical psychology	1	M-PSI/08
2 semester	Translational medicine and biotechnologies 2 (Total number of ects:5)	Clinical Biochemistry	2	BIO/12
		Clinical pathology	1	MED/05
		Microbiology	1	MED/07
		Laboratory medicine	1	MED/46
		Total number of compulsory credits/ects	59	

### 5° COURSE YEAR (available as of academic year 2026/27) Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
1 semester	Fundamentals of surgery (Total number of ects:11)	General surgery	5	MED/18
		Plastic surgery	1	MED/19
		Thoracic surgery	1	MED/21
		Vascular surgery	1	MED/22
		Cardiac surgery	1	MED/23
		Neurosurgery	1	MED/27
		Maxillofacial surgery	1	MED/29
1 semester	Fundamentals of surgery (Clerkship)		3	MED/18
1 semester	Gynecology and reproductive medicine (Total number of ects:6)	Urology	1	MED/24
		Obstetrics, gynecology	5	MED/40
1 semester	Gynecology and reproductive medicine (Clerkship) (Total number of ects:2)	Urology	1	MED/24
		Obstetrics, gynecology	1	MED/40
1 semester	Medical sciences and clinical investigation		5	MED/09
1 semester	Medical sciences and clinical investigation (Clerkship) (Total number of ects:3)	Internal medicine	2	MED/09
		Rheumatology	1	MED/16
1 semester	Neurobiology, human behaviour and clinical neuroscience (clerkship) (Total number of ects:2)	Mental health	1	MED/25
		Neurology	1	MED/26
1 semester	Neurological and behavioural disorders (Total number of ects:12)	Pharmacology	2	BIO/14
		Mental health	4	MED/25
		Neurology	4	MED/26
		Rehabilitation medicine	1	MED/34
		Neuroradiology	1	MED/37
2 semester	Evaluation internship - Medical sciences		5	ND
2 semester	Evaluation internship - Surgical sciences		5	ND
2 semester	Pediatrics and child care (Total number of ects:6)	Pediatrics	5	MED/38
		Child neuropsychiatry	1	MED/39
2 semester	Pediatrics and child care (Clerkship)		1	MED/38
2 semester	Public, global health, occupational medicine and forensic sciences (Total number of ects:12)	Medical statistic	1	MED/01
		General and applied hygiene	3	MED/42
		Forensic medicine	4	MED/43
		Occupational medicine	3	MED/44
		Business economics	1	SECS-P/07
		Total number of compulsory credits/ects	73	

### 6° COURSE YEAR (available as of academic year 2027/28) Core/compulsory courses/activities

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
year	Evaluation internship - General practice		5	ND
1 semester	Emergencies_ (Total number of ects:6)	Internal medicine	2	MED/09
		General surgery	2	MED/18
		Anesthesiology	2	MED/41
1 semester	Emergencies_ (Clerkship) (Total number of ects:3)	Internal medicine	1	MED/09
		General surgery	1	MED/18
		Anesthesiology	1	MED/41
1 semester	Multidisciplinary clinical management (Total number of ects:9)	Medic informatics	1	INF/01
		History of medicine	1	MED/02
		Medical oncology	1	MED/06
		Respiratory diseases	1	MED/10
		Cardiovascular diseases	1	MED/11
		Endocrinology	1	MED/13
		Nephrology	1	MED/14
		General surgery	1	MED/18
		Radiology and radiotherapy	1	MED/36
1 semester	Multidisciplinary clinical management (Clerkship) (Total number of ects:2)	Internal medicine	1	MED/09
		Gastroenterology	1	MED/12
		Total number of compulsory credits/ects	25	

<b>Elective courses</b>				
<b>By the end of 6 years students should acquire also 8 credits/ECTS in optional clerkships to be chosen among the following:</b>				
year	Clinical and surgical pathology (Clerkship) - Pathology		3	MED/08
year	Clinical imaging (Clerkship) - Radiology		1	MED/36
year	Clinical oncology, emato-oncology and radiotherapy - Blood diseases (Clerkship)		3	MED/15
year	Clinical oncology, emato-oncology and radiotherapy - Oncology (Clerkship)		3	MED/06
year	Clinical oncology, emato-oncology and radiotherapy - Pathology (Clerkship)		3	MED/08
year	Clinical oncology, emato-oncology and radiotherapy - Pharmacology (Clerkship)		3	BIO/14
year	Clinical oncology, emato-oncology and radiotherapy - Radiology (Clerkship)		3	MED/36
year	Emergencies - Anesthesiology (Clerkship)		3	MED/41
year	Emergencies - General surgery (Clerkship)		3	MED/18
year	Emergencies - Internal medicine (Clerkship)		3	MED/09
year	Fundamental pharmacology and therapeutics - Pharmacology (Clerkship)		3	BIO/14
year	Fundamentals of clinical medicine 1 - Cardiovascular diseases (Clerkship)		3	MED/23
year	Fundamentals of clinical medicine 1 - Nephrology (Clerkship)		3	MED/14
year	Fundamentals of clinical medicine 1 - Respiratory diseases (Clerkship)		3	MED/10
year	Fundamentals of clinical medicine 2 - Blood diseases (Clerkship)		3	MED/15
year	Fundamentals of clinical medicine 2 - Internal medicine (Clerkship)		3	MED/09
year	Fundamentals of clinical medicine 2 - Rheumatology (Clerkship)		3	MED/16
year	Fundamentals of clinical medicine 3 - Dermatology (Clerkship)		3	MED/35
year	Fundamentals of clinical medicine 3 - Endocrinology (Clerkship)		3	MED/13
year	Fundamentals of clinical medicine 3 - Gastroenterology (Clerkship)		3	MED/12
year	Fundamentals of clinical medicine 3 - Physical training sciences and methodology (Clerkship)		3	M-EDF/01
year	Fundamentals of surgery - Cardiac surgery (Clerkship)		3	MED/23
year	Fundamentals of surgery - General surgery (Clerkship)		3	MED/18
year	Fundamentals of surgery - Maxillofacial surgery (Clerkship)		3	MED/29
year	Fundamentals of surgery - Neurosurgery (Clerkship)		3	MED/27
year	Fundamentals of surgery - Plastic surgery (Clerkship)		3	MED/19
year	Fundamentals of surgery - Thoracic surgery (Clerkship)		3	MED/21
year	Fundamentals of surgery - Urology (Clerkship)		3	MED/24
year	Fundamentals of surgery - Vascular surgery (Clerkship)		3	MED/22
year	Gynecology and reproductive medicine - Obstetrics, gynecology (Clerkship)		3	MED/40
year	Gynecology and reproductive medicine - Urology (Clerkship)		1	MED/24
year	Head and Neck - Odontostomatological diseases (Clerkship)		3	MED/28
year	Head and Neck - Ophthalmology (Clerkship)		3	MED/30
year	Head and Neck - Otorhinolaryngology (Clerkship)		3	MED/31
year	Infectious diseases - Infectious diseases (Clerkship)		3	MED/17
year	Infectious diseases - Pharmacology (Clerkship)		1	BIO/14
year	Medical psychology - Clinical psychology (Clerkship)		3	M-PSI/08
year	Medical psychology - General psychology (Clerkship)		3	M-PSI/01
year	Medical psychology - Psychobiology and physiologic psychology (Clerkship)		3	M-PSI/01
year	Medical science and clinical investigation - Blood diseases (Clerkship)		3	MED/15
year	Medical science and clinical investigation - Cardiovascular diseases (Clerkship)		3	MED/11
year	Medical science and clinical investigation - Endocrinology (Clerkship)		3	MED/13
year	Medical science and clinical investigation - Gastroenterology (Clerkship)		3	MED/12
year	Medical science and clinical investigation - Nephrology (Clerkship)		3	MED/14
year	Medical science and clinical investigation - Physical training sciences and methodology (Clerkship)		3	M-EDF/01
year	Medical science and clinical investigation - Respiratory diseases (Clerkship)		3	MED/10
year	Medical science and clinical investigation - Rheumatology (Clerkship)		3	MED/16
year	Neurological and behavioural disorders - Mental health (Clerkship)		3	MED/25
year	Neurological and behavioural disorders - Neurology (Clerkship)		3	MED/26
year	Neurological and behavioural disorders - Neuroradiology (Clerkship)		3	MED/37
year	Neurological and behavioural disorders - Neurosurgery (Clerkship)		3	MED/27
year	Neurological and behavioural disorders - Pharmacology (Clerkship)		3	BIO/14
year	Neurological and behavioural disorders - Rehabilitation medicine (Clerkship)		3	MED/34
year	Orthopedics, traumatology and rehabilitation - Orthopedics (Clerkship)		3	MED/33
year	Orthopedics, traumatology and rehabilitation - Rehabilitation medicine (Clerkship)		3	MED/34
year	Pediatrics and child care - Child neuropsychiatry (Clerkship)		3	MED/39
year	Pediatrics and child care - Pediatrics (Clerkship)		3	MED/38
year	Public, global health, occupational medicine and forensic sciences - Forensic medicine (Clerkship)		1	MED/43
year	Public, global health, occupational medicine and forensic sciences - General and applied hygiene (Clerkship)		3	MED/42
year	Public, global health, occupational medicine and forensic sciences - Medical statistic (Clerkship)		1	MED/01
year	Public, global health, occupational medicine and forensic sciences - Occupational medicine (Clerkship)		3	MED/44
year	Translational medicine and biotechnologies 2 - Clinical biochemistry (Clerkship)		1	BIO/12
year	Translational medicine and biotechnologies 2 - Clinical pathology (Clerkship)		1	MED/05
year	Translational medicine and biotechnologies 2 - Laboratory medicine (Clerkship)		1	MED/46
year	Translational medicine and biotechnologies 2 - Microbiology (Clerkship)		1	MED/07

### **Further elective courses**

**At the end of the 2nd semester of 5th year students must choose the last exam (Track) of the IMC course among the 10 Track options**

1 semester	Track 01 (Community-based and lifestyle medicine) (Total number of ects:10)	Physiology	1	BIO/09
		Genetics	1	MED/03
		Medical oncology	1	MED/06
		Internal medicine	1	MED/09
		Mental health	1	MED/25
		Rehabilitation medicine	2	MED/34



		Dermatology	1	MED/35
		Pediatrics	1	MED/38
		Obstetrics, gynecology	1	MED/40
1 semester	Track 02 (Primary care) (Total number of ects:10)	Internal medicine	2	MED/09
		Mental health	1	MED/25
		Odontostomatological diseases	1	MED/28
		Ophthalmological diseases	1	MED/30
		Otorhinolaryngological diseases	1	MED/31
		Pediatrics	1	MED/38
		Child neuropsychiatry	1	MED/39
		Obstetrics, gynecology	1	MED/40
		Nursing	1	MED/45
1 semester	Track 03 (Management of chronicity) (Total number of ects:10)	Pharmacology	1	BIO/14
		Internal medicine	1	MED/09
		Respiratory diseases	1	MED/10
		Cardiovascular diseases	1	MED/11
		Gastroenterology	1	MED/12
		Endocrinology	1	MED/13
		Nephrology	1	MED/14
		Rheumatology	1	MED/16
		Mental health	1	MED/25
		Neurology	1	MED/26
1 semester	Track 04 (Cancer) (Total number of ects:10)	General pathology and immunology	1	MED/04
		Medical oncology	3	MED/06
		Pathology	1	MED/08
		Respiratory diseases	1	MED/10
		Gastroenterology	1	MED/12
		Blood diseases	1	MED/15
		Radiology and radiotherapy	1	MED/36
		Pediatrics	1	MED/38
1 semester	Track 05 (Public, global and occupational health and healthcare management) (Total number of ects:10)	Pharmacology	1	BIO/14
		General pathology and immunology	1	MED/04
		Microbiology	1	MED/07
		Infectious diseases	1	MED/17
		General and applied hygiene	2	MED/42
		Forensic medicine	2	MED/43
		Occupational medicine	2	MED/44
1 semester	Track 06 (Intensive and emergency care) (Total number of ects:10)	Internal medicine	1	MED/09
		Cardiovascular diseases	1	MED/11
		General surgery	1	MED/18
		Cardiac surgery	1	MED/23
		Neurology	1	MED/26
		Neurosurgery	1	MED/27
		Orthopedics	1	MED/33
		Radiology and radiotherapy	1	MED/36
		Anesthesiology	2	MED/41
1 semester	Track 07 (Surgical approach to diseases) (Total number of ects:10)	General surgery	1	MED/18
		Plastic surgery	1	MED/19
		Pediatric surgery	1	MED/20
		Vascular surgery	1	MED/22
		Cardiac surgery	1	MED/23
		Urology	1	MED/24
		Neurosurgery	1	MED/27
		Maxillofacial surgery	1	MED/29
		Ophthalmological diseases	1	MED/30
		Orthopedics	1	MED/33
1 semester	Track 08 (Surgical and interventional oncology) (Total number of ects:10)	General surgery	2	MED/18
		Plastic surgery	1	MED/19
		Thoracic surgery	1	MED/21
		Urology	1	MED/24
		Neurosurgery	1	MED/27
		Maxillofacial surgery	1	MED/29
		Otorhinolaryngology	1	MED/31
		Orthopedics	1	MED/33
		Obstetrics, gynecology	1	MED/40
1 semester	Track 09 (Advanced techniques in diagnostics and interventional imaging) (Total number of ects:10)	Anatomy	1	BIO/16
		Pathology	1	MED/08
		Cardiovascular diseases	1	MED/11
		Gastroenterology	1	MED/12
		Neurology	1	MED/26
		Ophthalmological diseases	1	MED/30
		Audiology	1	MED/32
		Radiology and radiotherapy	2	MED/36
		Neuroradiology	1	MED/37
1 semester	Track 10 (Methodological approach to biomedical research) (Total number of ects:10)	Physiology	1	BIO/09
		Pharmacology	1	BIO/14
		Anatomy	1	BIO/16
		Histology and embryology	1	BIO/17
		Genetics	1	MED/03
		General pathology and immunology	1	MED/04
		Clinical pathology	1	MED/05
		Microbiology	1	MED/07
		Pathology	1	MED/08
		Laboratory medicine	1	MED/46

2 semester	Track 01 (Community-based and lifestyle medicine) (Clerkship) (Total number of ects:4)	Internal medicine	2	MED/09
		Mental health	1	MED/25
2 semester	Track 02 (Primary care) (Clerkship) (Total number of ects:4)	Fisical training sciences and methodology	1	M-EDF/01
		Internal medicine	2	MED/09
		Midwifery	1	MED/47
2 semester	Track 03 (Management of cronicity) (Clerkship) (Total number of ects:4)	Clinical psychology	1	M-PSI/08
		Internal Medicine	1	MED/09
		Rehabilitation medicine	1	MED/24
2 semester	Track 04 (Cancer) (Clerkship) (Total number of ects:4)	Physical training sciences and methodology	1	M-EDF/01
		Clinical psychology	1	M-PSI/08
		Medical oncology	1	MED/06
		Radiology and radiotherapy	1	MED/36
2 semester	Track 05 (Public, global and occupational health and healthcare management) (Clerkship) (Total number of ects:4)	Anesthesiology	1	MED/41
		Clinical psychology	1	M-PSI/08
		Medical statistics	1	MED/01
		Medical history	1	MED/02
		General and applied hygiene	1	MED/42
2 semester	Track 06 (Intensive and emergency care) (Clerkship) (Total number of ects:4)	Forensic medicine	1	MED/43
		Internal medicine	1	MED/09
		General surgery	1	MED/18
		Pediatrics	1	MED/38
2 semester	Track 07 (Surgical approach to diseases) (Clerkship) (Total number of ects:4)	Anesthesiology	1	MED/41
		General surgery	1	MED/18
		Odontostomatological diseases	1	MED/28
		Ophthalmology	1	MED/30
2 semester	Track 08 (Surgical and interventional oncology) (Clerkship) (Total number of ects:4)	Obstetrics and gynecology	1	MED/40
		Gastroenterology	1	MED/12
		General surgery	1	MED/18
		Pediatric surgery	1	MED/20
		Radiology and radiotherapy	1	MED/36
2 semester	Track 09 (Advanced techniques in diagnostics and interventional imaging) (Clerkship) (Total number of ects:4)	Vascular surgery	1	MED/22
		Radiology and radiotherapy	1	MED/36
		Neuroradiology	1	MED/37
		Biotechnology and methods in laboratory medicine	1	MED/46
2 semester	Track 10 (Methodological approach to biomedical research) (Clerkship) (Total number of ects:4)	Biochimica clinica	1	BIO/12
		Medica statistics	1	MED/01
		Medical history	1	MED/02
		Biotechnology and methods in laboratory medicine	1	MED/46

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

### **End of course requirements**

Final examination		18	NA
	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**

Anatomy	Histology	Core /compulsory
Biochemistry	Fundamentals_of_basic_sciences	Core /compulsory
	Cells, molecules and genes	Core /compulsory
Emergencies_	Fundamentals of clinical medicine 3	Core /compulsory
	Fundamentals of clinical medicine 2	Core /compulsory
	Fundamentals of clinical medicine 1	Core /compulsory
	Clinical imaging	Core /compulsory
	Clinical_and_surgical_pathology	Core /compulsory
	Fundamental pharmacology and therapeutics	Core /compulsory
	Neurological and behavioural disorders	Core /compulsory
Functions 1	Anatomy	Core /compulsory
	Biochemistry	Core /compulsory
Functions 2	Anatomy	Core /compulsory
	Biochemistry	Core /compulsory
Fundamental pharmacology and therapeutics	Foundational pharmacological principles	Core /compulsory
Fundamentals of clinical medicine 1	Mechanisms_of_diseases	Core /compulsory
	Microbiology	Core /compulsory
Fundamentals of clinical medicine 2	Mechanisms_of_diseases	Core /compulsory
	Microbiology	Core /compulsory

Fundamentals of clinical medicine 3	Mechanisms_of_diseases	Core /compulsory
	Microbiology	Core /compulsory
Fundamentals of surgery	Fundamentals of clinical medicine 3	Core /compulsory
	Fundamentals of clinical medicine 2	Core /compulsory
	Fundamentals of clinical medicine 1	Core /compulsory
	Clinical imaging	Core /compulsory
	Clinical_and_surgical_pathology	Core /compulsory
	Fundamental pharmacology and therapeutics	Core /compulsory
	Neurological and behavioural disorders	Core /compulsory
Genetics	Fundamentals_of_basic_sciences	Core /compulsory
	Cells, molecules and genes	Core /compulsory
Mechanisms_of_diseases	Anatomy	Core /compulsory
	Biochemistry	Core /compulsory
	Genetics	Core /compulsory
Medical sciences and clinical investigation	Fundamentals of clinical medicine 3	Core /compulsory
	Fundamentals of clinical medicine 2	Core /compulsory
	Fundamentals of clinical medicine 1	Core /compulsory
	Clinical imaging	Core /compulsory
	Clinical_and_surgical_pathology	Core /compulsory
	Fundamental pharmacology and therapeutics	Core /compulsory
	Neurological and behavioural disorders	Core /compulsory
Multidisciplinary clinical management	Fundamentals of surgery	Core /compulsory
	Medical sciences and clinical investigation	Core /compulsory
Translational medicine and biotechnologies 1	Microbiology	Core /compulsory
Translational medicine and biotechnologies 2	Translational medicine and biotechnologies 1	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.