UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2020/21
IN
MEDICAL BIOTECHNOLOGY AND MOLECULAR MEDICINE (Classe LM-9)
Immatricolati dall'Anno Accademico 2016/17

HEADING

Degree classification - Denomination and code:	LM-9
Degree title:	Dottore Magistrale
Curricula currently available:	NEUROSCIENCE / MEDICAL AND EXPERIMENTAL ONCOLOGY / MOLECULAR DIAGNOSTICS FOR PERSONALIZED MEDICINE / EXPERIMENTAL IMMUNOLOGY AND TRANSPLANTATIONS
Length of course:	2 years
Credits required for admission:	180
Total number of credits required to complete programme:	120
Course years currently available:	1st , 2nd
Access procedures:	Cap on student numbers,student selection based on entrance test
Course code:	D57

PERSONS/ROLES

Head of Study Programme

Prof.ssa Maura Francolini

Tutors - Faculty

Prof. Massimo Locati - Academic guidance tutor
Prof. Diego Fornasari - Internship tutor
Prof.ssa Anna Marozzi - Internship tutor
Dott.sa Federica Compostella - Erasmus and international mobility tutor

Degree Course website

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

International Students - Welcome desk:

Email: international.students@unimi.it

Student secretary: Mrs Lucia Loseto

Dip. Biotecnologie Mediche e Medicina Traslazionale sede di via Vanvitelli, 32 Tel. 0250317123 Email: lsbiotecmed@unimi.it

link to degree course regulations

https://www.unimi.it/it/corsi/corsi-di-laurea/medical-biotechnology-and-molecular-medicine

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

The Master Programme in Medical Biotechnology and Molecular Medicine is committed to form professionals, provided with a strong technical and theoretical background. The expected evolution of their careers will be to develop scientific methodologies and coordinate research projects in the fields of applied biotechnology and translational medicine. The Master Programme will provide students with a strong educational background on the genetic and molecular bases of diseases and the pathophysiological mechanisms that occur in humans in pathological states, in order to develop diagnostic and therapeutic strategies based on biotechnology. This knowledge will be integrated with a specific formation in the fields of informatics, biophysics, nanotechnology and pharmacology. The Master Programme is organized in common and curricular learning activities focused on neuroscience, oncology, molecular diagnostics and immunobiotechnology. As a part of the common course, the students will learn about economic management of a scientific project, with emphasis on the construction of a business plan and cost analysis. The Master Programme dedicates a long period of time, almost the entire second year, to laboratory activities in which the student, under the supervision of a tutor, will autonomously develop and apply different experimental approaches in the context of a wider research project. This activity will be finalized to the preparation of the degree programme final exam.

Expected learning outcomes

The Master Programme in Medical Biotechnology and Molecular Medicine graduate will be able, in her/his future career, to coordinate and run research projects in the field of biotechnology and molecular medicine and to collaborate with physicians in the development of novel and innovative diagnostic and therapeutic strategies.

Professional profile and employment opportunities

The objective of the course is to provide the scientific community with experts in the fields of medical biotechnology and molecular medicine able to develop new experimental models for the study of human diseases, to develop new diagnostic approaches, to identify new therapeutic molecules, to devise innovative drug delivery systems. All these possibilities arise from the competences of the Master's graduate who will have a strong medical educational background that will allow her/him to represent a fruitful interface with the clinics, building a bridge between the bench and the bedside. A deep knowledge of the pathogenetic mechanisms of diseases is required in order to apply basic disciplines to the resolution of medical problems.

Employment opportunities: public and private research structures, including Universities, CNR (National Research Council), Istituto Superiore di Sanità (National Institute for health); Hospitals; private pharmaceutical, diagnostics and biotechnological companies; companies supporting scientific research (instruments, biotechnological reagents); companies involved in science communication and publishing.

Below a list of professional profiles:

Medical Science Liaison (MSL) within pharmaceutical and biotechnological companies

In the pharmaceutical and biotechnological companies, this new professional figure has the role of establishing scientific relationships with clinicians, supporting the appropriate use of the drugs of interest for the company.This professional has a strong medical and pharmacological background that enable her/him to talk with physicians in order to solve clinical problem related to the use of specific drugs.

Clinical Monitor within pharmaceutical and biotechnological companies; CRO (Clinical Research Organization) (upon completion of a specific training course)

Thanks to the strong background in pharmacology and statistics this expert will be able to coordinate clinical studies.

Market Access Manager within pharmaceutical and biotechnological companies; consulting agencies, AIFA (Italian agency for drugs) (upon completion of a specific training course)

Thanks to the strong background in economy and pharmacology, and a knowledge of ethical issues related to commercialization of drugs, the graduate will be in the ideal position to establish stable relationships with the Regulatory Authorities and, in general, with the Institutions with the aim of promoting the approval and the access to the market of new pharmacological and biotechnological products.

Medical and scientific communication advisor within scientific and medical communication agencies and publishers

Thanks to the multidisciplinary approaches to medical sciences acquired during the course, the Master Programme' graduate may evolve into a medical writer or a consultant for the development of distance learning modules for the Continuing Medical Education (CME) or other health professionals requiring continuing education or again as an advisor for pharmaceutical and biotechnological companies in the communication with patient organizations.

The graduates in the Master Program in Medical Biotechnology and Molecular Medicine will have access to PhD programs, second level Master degrees, Specialization School in Medical Genetics, Medical Pharmacology, Clinical Biochemistry, Microbiology and Virology, Nutrition. After the State Board Examination, the graduates can enter into the Professional Register of Biologists (Senior Section).

Pre-requisites for admission

Italian and European students admitted to attend the Master Program are identified by a graded list determined on the basis of the scores of the admission test. This graded list will be also used for the choice of the curriculum. See below for extra European students*

The date of the entrance test will be communicated later in the announcement of selection published on the website of UNIMI.

For Italian, European or equivalent candidates the selection will be on the basis of a competitive written entrance exam. The admission test consists of a written test based on multiple-choice questions. The admission test will be in English and will include 50 questions on topics such as biology, biochemistry, physics, pharmacology, immunology, pathology, genetics.

*For non-EU students resident abroad (applicants for a student visa) the selection will be based on assessment of the personal and scholastic curriculum.

Programme structure

The planned length of the Master Program in Medical Biotechnology and Molecular Medicine is two years, divided in 6 quarters, during which the student will acquire a total of 120 ects. The first and second quarters of the first year include learning activities common to all students, with the aim of providing them with a strong and deep knowledge in the different areas of interest of medical biotechnology. The third quarter of the same year is organized in four curricular learning activities: neuroscience, medical and experimental oncology, diagnostics for personalized medicine, experimental

immunology and transplantations. This curricular activity are aimed to integrate the more general educational background of our graduates with more specific translational and clinical information deriving from them. At the beginning of the Master Program, each student will choose one of the four curricula. In the fourth quarter (second year), part of the activities will be dedicated to the socio-economic aspects of biotechnology, with emphasis on economy and bioethics. The remaining part of the fourth quarter and the entire fifth and sixth quarters will be dedicated to research activities in selected laboratories (internship, see below). During the two years, the students will have the opportunity of acquiring 8 ects as electives, chosen among the different proposals from the Course itself or from other Courses of our institution, as long as their subject is congruent with the objectives of the Master Programme.

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.

Campus

The common learning activities will be held at the Dipartimento di Biotecnologie Mediche e Medicina Traslazionale - Via Vanvitelli, 32 – 20129 Milano.

Curricular learning activities will be held at Dipartimento di Biotecnologie Mediche e Medicina Traslazionale and at Istituto Nazionale per la Cura e lo Studio dei Tumori, via Venezian, 1 – 20133 Milano.

Subjects organisation

Lectures and seminars

Lecture is the explanation by the teacher of the course about subjects regarded as fundamental for the acquisition of the basic knowledge in a given discipline. Seminars are similar to lectures, but are held by specialists in order to provide a deeper knowledge in certain fields, the subjects illustrated during seminars are part of the program of the course and are part of the final test.

Laboratory activities

During laboratory activities the student, under the supervision of a tutor, will autonomously develop different experimental approaches in the context of a wider research project. This activity will be finalized to the preparation of the degree program final exam.

Professionalizing activities

Professionalizing activities are part of the laboratory activities.

Elective training chosen by the students

The course provides for a 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 attendance is compulsory. 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.

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.

Tutoring

The Master Programme offers a tutorship service to help students in their progression through the course with specific reference to internship selection and dissertation preparation as well as international mobility (see tutor list above)

Compulsory attendance

The student is required to attend all the teaching activities, with a tolerance of no more than 25% 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.

Testing and assessment procedures

Each course has a single exam, which is always individual (art. 22, punto 1, del Regolamento Didattico d’Ateneo), and the score will be expressed in thirtieths (art. 11, comma 7, lettera e) del citato DM 270/2004 e dell’art. 22, punto 7 del Regolamento Didattico di Ateneo)

Internship criteria

During the internship, the students will be directly in charge for the development of a defined research project, with the aim

of generating experimental data that will be used for the preparation of the degree program final exam. The laboratory activities are related to the specific curriculum previously chosen by the student, are compulsory and will be certified by the tutor and by a committee.

Degree programme final exam

The final exam consists of: written text, oral presentation and defence of an experimental thesis containing the data obtained by the student during her/his attendance to the research lab. The thesis will be elaborated under the supervision of a professor belonging to the Master Program in Medical Biotechnology and Molecular Medicine with the collaboration of a tutor. The committee will take in consideration the quality of the thesis, the quality of the public presentation and the scientific maturity of the candidate during the discussion.

Lecture timetable

https://medicalbiotechnology.cdl.unimi.it/en/study/course-timetable

ADMISSION TO MASTERS PROGRAMMES

2 Admission for students from other universities

To be admitted to the entrance test, candidates from Italian and EU universities have to possess 180 ects obtained in the Bachelor's degree. Specifically, 50 ects have to derive from the following areas: BIO/09 (Physiology), BIO/10 (Biochemistry), BIO/11 (Molecular biology), BIO/12 (Clinical biochemistry), BIO/13 (Biology), BIO/14 (Pharmacology), BIO/16 (Human anatomy), BIO/18 (Genetics), BIO/19 (General microbiology), MED/01 (Medical statistics), MED/03 (Human genetics), MED/04 (General pathology and immunology), MED/05 (Clinical pathology), MED/06 (Medical oncology), MED/07 (Microbiology), MED/08 (Pathology), MED/09 (Internal medicine), MED/25 (Mental health), MED/26 (Neurology), MED/46 (Laboratory medicine), INF/01 (Informatics), FIS/07 (Medical physics).

For non-EU students resident abroad (applicants for a student visa) the admission to the Master Programme will be based on the assessment of the personal and scholastic curriculum

In order to profitably follow the learning activities, the candidate should have a good knowledge of spoken and written English. The B2 level is required and the certification has to be provided at the registration of the admission test.

Students waiting to obtain the Bachelor's Degree, can participate in the admission test "sub iudice". In case of success, they will be accepted only if they will obtain the Bachelor degree by December 31th, also possessing the prerequisite described above.

More details about the selection/admission procedure can be find below in the Admission Criteria paragraph.

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 Master programme in Medical Biotechnology and Molecular Medicine supports international mobility with leading international universities, as well as the possibility for students to earn credits through exchange education and training programmes with Partner organizations.

Available programmes:

- Bilateral agreements in the framework of the Erasmus + programme with: University of Leuven (Katolieke Universiteit Leuven, Belgium), Leids Universitair Medish Centrum (LUMC) of the University of Leiden (Netherland) and University of Cantabria (Universidad de Cantabria, Spain).
- Traineeship with: Institute for Research in Biomedicine (IRB – Bellinzona, Switzerland), Tohoku Medical and Pharmaceutical Univesity (Japan), Tokushima University (Japan).

In recent years, a growing number of students have developed their professionalism and the European dimension of their training through residence periods abroad. Associated universities represent highly recognized European institutions, featuring reference schools (Master and PhD schools) in biomedical sciences and offer the possibility of carrying out research activities in a wide range of scientific fields covered by the Degree Programme. The students will thus be offered exciting opportunities to enhance their CVs and evaluate their interests in extending their careers in the international setting.

The Master course in Medical Biotechnology and Molecular Medicine offers second year students the possibility to carry out the entire practical training for the preparation of their final thesis work in one of the aforementioned institutions or with other institutions with which an agreement has been established. The student will have to define a research project related to his/her course of studies and curricular training, with the joint agreement of both the Unimi and the foreign tutors. The period abroad amounts to 9 months equivalent to 32 credits. A positive evaluation of the period abroad is required. The latter should be defined by the tutor in the foreign university, the Unimi tutor and is subjected to the approval by the Unimi

Didactic Council. Erasmus students who obtain outstanding results, proved by an official evaluation letter of the foreign tutor to the President of the Masters Commission, will be rewarded with 1-2 additional points in the final Laurea Grade.
Besides general informative meetings organized by the University, the Degree course in Medical Biotechnology provides specific support to interested/selected students through the organization of specific informative session and/or meeting with the tutor for mobility.

How to participate in Erasmus mobility programs

How to participate in Erasmus+ mobility programmes

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/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
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/corsi/corsi-di-laurea/medical-biotechnology-and-molecular-medicine

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

10

Number of places assigned

65

1st COURSE YEAR Core/compulsory courses/activities common to all curricula

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
1 trimester	Advanced microscopic techniques and nanotechnology		6	FIS/07
1 trimester	Applied pharmacology to biotechnology		7	BIO/14
1 trimester	Pathogenetic basis of diseases (Total number of ects:12)	General pathology and immunology	6	MED/04
		Internal medicine	6	MED/09
2 trimester	Genetic and molecular bases of diseases (Total number of ects:14)	Biology	8	BIO/13
		Medical genetics	6	MED/03
2 trimester	Human biochemistry		9	BIO/10
2 trimester	Molecular biology applied to biotechnology		7	BIO/11
		Total number of compulsory credits/ects	55	

2nd COURSE YEAR Core/compulsory courses/activities common to all curricula

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
	Degree programme final exam		21	ND
year	Professionalizing training activities		4	ND

1 year	Further learning activities (linguistic, informatic, relational)		3	ND
~~*1 trimester*~~	Social aspects of biotechnology (Total number of ects:11)	Economical politics	5	SECS-P/02
		History of medicine	6	MED/02
		Total number of compulsory credits/ects	39	

Further elective courses common to all curricula

In the first year, the student must gain 4 ects of further electives

In the second year, the student must gain 4 ects of further electives

LIST OF CURRENTLY AVAILABLE CURRICULA

NEUROSCIENCE Course years currently available: 1st, 2nd
MEDICAL AND EXPERIMENTAL ONCOLOGY Course years currently available: 1st, 2nd
MOLECULAR DIAGNOSTICS FOR PERSONALIZED MEDICINE Course years currently available: 1st, 2nd
EXPERIMENTAL IMMUNOLOGY AND TRANSPLANTATIONS Course years currently available: 1st, 2nd

CURRICULUM: [D57-A] NEUROSCIENCE

Core learning objectives for the course

To provide our graduates with a strong background in the fields of neurodegenerative and psychiatric diseases, with emphasis on the molecular pathogenesis, the most recent neuroimaging approaches and the pharmacological strategies for their treatment. Graduates will also follow classes of neurology and psychiatry in order to contextualize basic science into a clinical approach.

Expected learning outcomes

Our graduates will acquire competences in the fields of neurobiology, neuropsychopharmacology, neuroimaging, all of which in a clinical perspective, that will allow them to establish interfaces with neurologists and psychiatrists for the development of a translational approach to disease.

Professional profile and employment opportunities

Researcher in the fields of medical biotechnology and molecular medicine
Medical Science Liaison (MSL)
Clinical Monitor
Market Access Manager
Medical and scientific communication advisor

1st COURSE YEAR Core/compulsory courses/activities Curriculum-specific features NEUROSCIENCE

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
3 trimester	Molecular diagnostics and therapy (Total number of ects:6)	Radiology	1	MED/36
		Neurology	2	MED/26
		Pharmacology	3	BIO/14
3 trimester	Neurobiology (Total number of ects:6)	Neurology	1	MED/26
		Biochemistry	1	BIO/10
		Pharmacology	1	BIO/14
		Physiology	3	BIO/09
3 trimester	Pathogenetic bases of neurological and psychiatric disorders (Total number of ects:6)	Molecular biology	1	BIO/11
		Endocrinology	1	MED/13
		Mental health	2	MED/25
		Neurology	2	MED/26
		Total number of compulsory credits/ects	18	

CURRICULUM: [D57-B] MEDICAL AND EXPERIMENTAL ONCOLOGY

Core learning objectives for the course

To provide our graduates with the latest knowledges on the molecular biology of the neoplastic cells and the immunological implications of cancer. Emphasis will be put on the research and development of new diagnostic and therapeutic methodologies. Graduates will also learn about epidemiology and clinics of solid and liquid tumors.

Expected learning outcomes

Our graduates will develop competences in the field of molecular oncology, with a strong background in cancer immunology. They will be able to develop innovative therapeutic strategies.

Professional profile and employment opportunities

Researcher in the fields of medical biotechnology and molecular medicine
Medical Science Liaison (MSL)
Clinical Monitor
Market Access Manager
Medical and scientific communication advisor

1st COURSE YEAR Core/compulsory courses/activities Curriculum-specific features MEDICAL AND EXPERIMENTAL ONCOLOGY				
Scheduling	**Learning activity**	**Module/teaching unit**	**Ects**	**Sector**
3 trimester	Cancer immunology (ONC) (Total number of ects:6)	General pathology and immunology	2	MED/04
		Medical oncology	2	MED/06
		Blood diseases	2	MED/15
3 trimester	Epidemiology, pathogenesis and diagnostics of cancer (Total number of ects:6)	Medical statistics	1	MED/01
		General pathology and immunology	1	MED/04
		Medical Oncology	2	MED/06
		Blood diseases	2	MED/15
3 trimester	Research and development of new diagnostic and therapeutic metodologies (Total number of ects:6)	Pathology	1	MED/08
		Radiology	1	MED/36
		Blood diseases	2	MED/15
		Molecular biology	2	BIO/11
		Total number of compulsory credits/ects	18	

CURRICULUM: [D57-C] MOLECULAR DIAGNOSTICS FOR PERSONALIZED MEDICINE

Core learning objectives for the course

To provide our graduates with a strong background in the latest diagnostic approaches based on biotechnology, molecular biology and genetics. The aim is to form professionals able to interact with clinicians for the definition of personalized therapeutic strategies. We also intend to give our graduates a background in the regulatory issues related to the data and laboratory management.

Expected learning outcomes

Our graduates will possess competences in different fields of molecular diagnostics such as genetics, microbiology, clinical biochemistry, forensic medicine and reproductive medicine.

Professional profile and employment opportunities

Researcher in the fields of medical biotechnology and molecular medicine
Medical Science Liaison (MSL)
Clinical Monitor
Market Access Manager
Medical and scientific communication advisor

1st COURSE YEAR Core/compulsory courses/activities Curriculum-specific features MOLECULAR DIAGNOSTICS FOR PERSONALIZED MEDICINE				
Scheduling	**Learning activity**	**Module/teaching unit**	**Ects**	**Sector**
3 trimester	Advanced techniques in medical biotechnology (Total number of ects:6)	Molecular biology	1	BIO/11
		Obstetrics and gynecology	1	MED/40
		Biology	2	BIO/13
		Biochemistry	2	BIO/10
3 trimester	Data and laboratory management (Total number of ects:6)	Medical statistics	1	MED/01
		Laboratory medicine	1	MED/46
		Clinical pathology	2	MED/05
		Forensic medicine	2	MED/43
3 trimester	Molecular diagnostics (Total number of ects:6)	Clinical biochemistry	2	BIO/12
		Human genetics	2	MED/03
		Microbiology	2	MED/07
		Total number of compulsory credits/ects	18	

CURRICULUM: [D57-D] EXPERIMENTAL IMMUNOLOGY AND TRANSPLANTATIONS

Core learning objectives for the course

To provide our graduates with an advanced formation in immunology with emphasis on the manipulation of the immune system for therapeutic purposes. In this perspective they will learn about cancer immunology. Graduates will also receive a strong background in regenerative medicine and transplantations, with emphasis on biomaterials and stem cells.

Expected learning outcomes

Our graduates will possess deep knowledges on the physiology and pathology of immune system and on the principles of regenerative medicine and transplantations.

Professional profile and employment opportunities

Researcher in the fields of medical biotechnology and molecular medicine
Medical Science Liaison (MSL)
Clinical Monitor
Market Access Manager
Medical and scientific communication advisor

1st COURSE YEAR Core/compulsory courses/activities Curriculum-specific features EXPERIMENTAL IMMUNOLOGY AND TRANSPLANTATIONS

Scheduling	Learning activity	Module/teaching unit	Ects	Sector
3 trimester	Cancer immunology (IMM) (Total number of ects:6)	General pathology and immunology	2	MED/04
		Medical oncology	2	MED/06
		Blood diseases	2	MED/15
3 trimester	Experimental immunology and immunobiotechnology (Total number of ects:6)	General pathology and immunology	1	MED/04
		Reumatology	1	MED/16
		Laboratory medicine	2	MED/46
		Domestic animal infectious diseases	2	VET/05
3 trimester	Transplantation and tissue engineering (Total number of ects:6)	Forensic medicine	1	MED/43
		Industrial bioengineering	1	ING-IND/34
		Blood diseases	1	MED/15
		General surgery	3	MED/18
		Total number of compulsory credits/ects	18	

COURSE PROGRESSION REQUIREMENTS

In order to start the laboratory activity, the student has to pass 7 exams: the 6 common exams of the first two quarters and, afterwards, 1 exam out of his specific curriculum.