



UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2025/26
SINGLE-CYCLE DEGREE
Pharmacy (Classe LM-13)
enrolled from 2009/10 until 2021/22 academic year

HEADING

| | |
|--|--|
| Degree classification - Denomination and code: | LM-13 Pharmacy and industrial pharmacy |
| Degree title: | Dottore Magistrale |
| Length of course: | 5 years |
| Total number of credits required to complete programme: | 300 |
| Years of course currently available: | 5th |
| Access procedures: | Cap on student, student selection based on entrance test |
| Course code: | E24 |

PERSONS/ROLES

Head of Interdepartmental Study Programme

Prof. Alessandro Pedretti - Via Luigi Mangiagalli 25, Milano

Tutors - Faculty

Tutor per l'orientamento (suddivisione studentesse e studenti in base a cognome):

Primo biennio

A-C Prof. Valerio Magnaghi

D-F Dott.ssa Silvia Araneo

G-L Prof.ssa Valeria Crippa

M-R Prof. Alessandro Pedretti

S-Z Prof.ssa Roberta Moretti

Secondo triennio

A-D Prof. Stefano Bellosta

E-H Dott.ssa Alessandra Colciago

I-M Prof.ssa Gabriella Roda

N-Q Prof.ssa Marina Montagnani Marelli

R-Z Prof. Angelo Sala

Referente studenti lavoratori, studenti con disabilità e DSA, studenti stranieri

Prof.ssa Irma Colombo

Tutor per la mobilità internazionale e l'Erasmus

Prof.ssa Stefania Maria Ceruti

Tutor per tirocinio professionale in Farmacia

Coordinatore Prof.ssa Paola Minghetti

Tutor accademici (suddivisione studentesse e studenti in base a cognome):

Silvia Araneo (A, D)

Chiara Grazia Milena Gennari (B)

Irma Colombo (C)

Carla Perego (F, L)

Stefania Villa (E, G, H, I)

Luca Palugan (J, K, L, N, V, Z)

Alessandro Pedretti (M)

Chiara Di Lorenzo (O, P, Q)

Alessandra Colciago (R, T, U)

Paola Conti (S, W, X, Y)

Degree Course website

<https://farmacia.cdl.unimi.it/it>

Email: farmacia.rappresentantistudenti@unimi.it

Deputy Chair of the Interdepartmental Academic Board Prof.ssa Irma Colombo

FIRST ENROLMENT

<https://www.unimi.it/it/studiare/immatricolarsi-e-iscrivarsi>

Pharmacy course management

via Golgi 19 - Edificio 1, ingresso D - 20133 MILANO lun, merc, ven 9:30-11:30; mar e gio 13:30-15:30

<https://informastudenti.unimi.it/saw/ess?AUTH=SAML>

Secretary of the Interdepartmental Academic Board: Prof. Giovanni Grazioso

Via Luigi Mangiagalli, 25 - Milano Previo appuntamento telefonico o e-mail Email: giovanni.grazioso@unimi.it

Student registrar

Sedi e orari: <https://www.unimi.it/it/node/360>

Student registrar

Contatti: <https://www.unimi.it/it/node/359> Phone 0250325032

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

The aim of the Degree Course in Pharmacy is to provide a range of theoretical and practical knowledge in the biological, chemical, pharmaceutical, technological, pathophysiological, pharmacological and toxicological fields, which will allow graduates to deal with the entire sequence of the complex and multidisciplinary process that from structural design leads to the production, marketing and correct use of the prescription drug, according to codified standards. The Degree Course in Pharmacy also provides advanced scientific preparation in the healthcare field aimed at forming a professional figure of expert in the drugs and their use for therapeutic purposes. This specialized figure will be capable of serving as a fundamental element of connection between patient, doctor and public health structures, collaborating in monitoring the drug on the territory, the implementation of the therapy in both the local and hospital areas and will provide the patient and the doctor all the proper indications for a correct use of prescription drugs. On these bases, graduates from the Degree Course in Pharmacy will possess the scientific bases and the theoretical and practical knowledge necessary to exercise the profession of pharmacist and to operate as experts of drugs and health products (medical devices, medical-surgical devices, cosmetics, dietetics, food supplements, herbal products, in vitro diagnostics).

Expected learning outcomes

To achieve these educational objectives, the Degree Course in Pharmacy will provide the graduates the following:

- 1) a strong preparation on basic science topics (physical, chemical, biological, medical) with the aim of becoming acquainted with the scientific approach for solving problems inherent to his/her professional activity;
- 2) a thorough knowledge of the composition, technological characteristics, therapeutic efficacy, contraindications, ways of use, regulations and any other indication relating to the drugs;
- 3) the ability to apply the acquired scientific knowledge (chemical, biological, pharmaceutical, pharmacological, toxicological, technological, legislative and deontological) in the dosage of drugs, in the recognition of drugs with purity tests, and in the preparation of galenics;
- 4) adequate knowledge of biochemistry, pathophysiology and nutrition to be able to provide valid support in the therapeutic activities proposed by the doctor, promoting compliance and therefore the therapeutic result;
- 5) adequate knowledge in the field of drug-epidemiology and pharmacovigilance, aspects increasingly required for the correct use of drugs in the population;
- 6) knowledge of the legislative contexts and of their professional and ethical responsibilities necessary to undertake the profession in full autonomy;
- 7) the knowledge and learning ability required to face the specialization courses and Schools in Pharmaceutical and Pharmacological Areas.

To this end, the Degree Course in Pharmacy focuses in particular on the chemical (general and inorganic chemistry, organic chemistry), biochemical, technical- and chemical-pharmaceutical, pharmacological disciplines and also emphasizes practical laboratory activities. Other in-depth areas concern the aspects related to stability, toxicity, formulation, research and development, and information. for medicines and health products. Graduates in Pharmacy should have acquired multidisciplinary knowledge, which is essential for understanding the active substance, its structure and activities in relation to the interaction with biomolecules at a cellular and systemic level.

Professional profile and employment opportunities

The professional profile of pharmacist generated will be of a healthcare professional who contributes to the achievement of the objectives set by the National Health Service in the context of his scientific and technological multidisciplinary skills, in order to adequately respond to the changing needs of the society in the health field.

With the achievement of the Degree in Pharmacy and the related professional qualification, graduates will carry out, in accordance with Directive 2005/36 / EC, and subsequent amendments, the profession of pharmacist and will be authorized to exercise the following professional activities:

- preparation of the pharmaceutical form of drugs;
- manufacture and control of drugs;
- control of drugs in control laboratories
- storage, conservation and distribution of drugs in the wholesale trade phase;
- preparation, control, storage and distribution of drugs in pharmacies open to the public;
- preparation, control, storage and distribution of drugs in hospitals (hospital pharmacies);
- dissemination of information and advice in the field of drugs use.

These activities fall within the minimum common field coordinated by this directive; the training course may also consider other professional activities carried out in the European Union in the field of drugs in order to allow equal employment opportunities in the European context.

Initial knowledge required

Admission requirements

Admission to the single-cycle Master's degree programme in Pharmacy is capped pursuant to Law no. 264 of 2 August 1999. Applicants to the single-cycle Master's degree programme in Pharmacy must hold an upper secondary-school diploma or equivalent qualification obtained abroad, and adequate knowledge.

Admission assessment

Admission to the first Year of the single-cycle Master's degree programme in Pharmacy is subject to the candidate's taking the online multiple-choice TOLC-F test by CISIA (<http://www.cisiaonline.it/>). This selective test assesses the knowledge and skills required for attending the programme. The TOLC-F test consists of four sections, with questions on Biology, Chemistry, Mathematics, Physics, Logic and English (optional). The required knowledge level is equal to that achieved in upper secondary school. The schedule of TOLC-F tests held by our and other Italian universities is available at <https://tolc.cisiaonline.it/calendario.php>. Enrolment procedures and deadlines will be detailed in the call for applications to be posted on the University website at <https://farmacia.cdl.unimi.it/it/iscriversi>.

The required knowledge will be assessed through the admission test. In order to meet these requirements, candidates must achieve the minimum score set out in the call for applications. Admission is based on merit ranking, up to the number of places available.

Waivers from test requirements and admission to years subsequent to the first one are governed by the call for applications. For information: <https://farmacia.cdl.unimi.it/it/iscriversi>.

Additional learning requirements (OFA) and remedial activities

Enrolled students who have not achieved at least 4 points in the basic mathematics module of TOLC-F will have to fulfil additional learning requirements (OFA). For this purpose, they will attend remedial activities organized by the University, and then take a remedial test to prove they have filled their gaps. Students with OFA may not take the Mathematics and Statistics exam before fulfilling said requirements.

Learn more at <https://farmacia.cdl.unimi.it/it/studiare/le-matricole>.

Candidates who took the test and were not admitted may enrol in a limited number of single courses (with up to 60 places available), as provided by academic regulations, to earn credits to be used for future enrolment in a degree programme, upon passing the admission test, if any.

Transfer students

In case of transfer from another degree programme or from another university, admission to years subsequent to Year I will be subjected to an assessment of the student's previous academic records by the Interdepartmental Academic Board. Please refer to the call for applications for further details.

Compulsory attendance

Attendance is mandatory for laboratory courses, and strongly recommended for lectures.

Internship criteria

Starting from the second semester of Year IV, the student can start a professional internship in retail or hospital pharmacies after completing general and specific safety training courses held by the University and by the Association of Pharmacists, respectively, and passing all the exams of the first three years, which are graded on a scale of thirty. Starting from the second semester of Year III, students who were enrolled in Year II as 'repeaters' after failing to complete first-year exams within the deadline, and who have passed all the exams of the first three years, which are graded on a scale of thirty, may be authorised to start the internship by a resolution of the Interdepartmental Academic Board of the degree programme in Pharmacy. The Pharmacy internship must last six months full-time pursuant to art. 44(2)(b) of European Directive 2005/36/EC. Upon completion of the internship, the student will earn 30 credits (CFU). All the information regarding Pharmacy internships can be found at <https://www.unimi.it/en/node/12683/>.

Degree programme final exams

The final exam will award 15 CFU and it is based on the preparation of a paper on a subject covered by a course that the Upcoming graduates have taken and linked to their internship, to be agreed with the course lead instructor or another instructor in the same subject area. The chosen instructor will oversee the thesis work and act as the candidate's supervisor at the final exam before the Degree Board. This paper will relate to a research project carried out by the student in the laboratories of the University or other affiliated public or private entities; alternatively, the student may collect and discuss

bibliographic materials or other data in line with the contents of their degree programme. After passing the final exam, the candidate will be awarded a Master's degree in Pharmacy.

Admission to the final exam is subject to earning at least 285 CFU (277 for experimental theses) for the exams and internship.

Notes

For-credit assessment B2

In order to obtain their degree, students must be proficient in English at a B2 level under the Common European Framework of Reference for Languages (CEFR). This proficiency level may be certified as follows:

- By submitting a language certificate attesting B2 or higher level in English and issued no more than three years before the date of submission. You will find the list of language certificates recognized by the University at: <https://www.unimi.it/en/node/39322>). The certificate must be uploaded during the enrolment procedure, or subsequently to the portal <http://studente.unimi.it/uploadCertificazioniLingue>;

- By taking a placement test offered by the University Language Centre (SLAM) between October and January of the first year. Students who fail the test will be required to take a SLAM course.

The placement test is mandatory for all those who do not hold a valid certificate attesting to B2 or higher level.

Those who have not taken the placement test by the end of January or fail the end-of-course exam six times must obtain the necessary certification privately before graduating.

Computer skills

Students who are supposed to earn 3 credits (CFU) for basic computer skills, as provided by their degree programme, have to attend the Computer Science Course through the e-learning platform of the project called 3CFU Informatica accessible at the following link: <https://3cfuinformatica.unimi.it>

It is a blended course with a compulsory final exam.

The first exam session is scheduled for January, and more will follow according to a calendar to be made available on the course delivery platform.

Students who have already fulfilled an ICT Assessment during their previous studies should submit the related certification to their Academic Board, seeking its acknowledgement: it will be evaluated and they will receive a positive or negative feedback.

The Computer Science Course 3CFU course is managed by the CTU - Teaching and Learning Innovation and Multimedia Technology Centre.

EXPERIENCE OF STUDY ABROAD AS PART OF THE TRAINING PROGRAM

The University of Milan supports international mobility by providing its students with the opportunity to spend study and internship periods abroad. It is a unique chance to enrich your educational path in a new exciting environment.

The agreements entered into by the University with over 300 universities from the 27 EU member countries under the European Erasmus+ programme allow regularly enrolled students to carry out part of their studies at one of the partner universities or to undertake internships at companies, training and research centres and other organizations.

Similar international mobility opportunities are provided outside Europe, through agreements with a number of prestigious institutions.

Study and internships abroad

Thanks to mobility programs such as Erasmus +, Erasmus + Placement, and Erasmus Mundus, the Degree Course in Pharmacy offers its students the opportunity to spend training periods abroad. The Erasmus Placement Program also offers the possibility of carrying out a training internship abroad in companies as well as in other organizations or universities.

University and Institution partners involved in these programs mainly reside in Europe and the Balkan regions.

The locations, with whom Agreements have been established, offer the possibility of carrying out activities in a wide range of areas. During the mobility period, the student can:

- continue his/her studies by attending courses and the respective exams;
- carry out the thesis;
- carry out the internship in Hospital Pharmacies.

Each student is followed by a tutor identified within the Course.

Procedure for the recognition of study periods abroad: each student must propose a Learning Agreement regarding the training activities that lead to the recognition of a number of credits adequate for the period of stay abroad, namely:

- 60 credits for an academic year;
- 30 credits for an academic semester;
- 20 credits for an academic quarter;
- 15 credits for the internship period in the hospital pharmacy whose maximum duration is 3 months.

The study period abroad will be recognized as valid upon the acquisition of at least 70% of the credits specified in the learning agreement, while the thesis or internship activity will be considered valid only after acquisition of all credits.

For students who have satisfactorily accomplished the training program, the appropriate incentives, proposed by the teacher in charge, will be given by the Faculty's Commission during the graduation session.

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 Language Centre (SLAM).

<https://www.unimi.it/en/node/8/>

Learn more at <https://www.unimi.it/en/node/274/>

For assistance, please contact:

International Mobility Office

Via Santa Sofia 9 (second floor)

Tel. 02 503 13501-12589-13495-13502

Contacts: InformaStudenti; mobility.out@unimi.it

Student Desk booking through InformaStudenti

| 1st COURSE YEAR (disactivated from academic year 2022/23) Core/compulsory courses/activities common | | |
|--|-------------|-------------------------------------|
| Learning activity | Ects | Sector |
| Analytical Chemistry | 8 | CHIM/01 |
| Animal Biology | 7 | BIO/13 |
| Calculus and Statistics | 6 | MAT/05 |
| English proficiency B2 (2 ECTS) | 2 | ND |
| General and Inorganic Chemistry and Stoichiometry | 10 | CHIM/03 |
| Human Anatomy | 9 | BIO/16 |
| Physics | 6 | FIS/01 |
| Plant Biology and Pharmaceutical botany | 8 | BIO/15 |
| Total compulsory credits | | 56 |
| 2nd COURSE YEAR (disactivated from academic year 2023/24) Core/compulsory courses/activities common | | |
| Learning activity | Ects | Sector |
| APPLIED MICROBIOLOGY AND HYGIENE | 10 | BIO/19, MED/42 |
| General Biochemistry | 6 | BIO/10 |
| General Pharmacology and Pharmacognosy | 10 | BIO/14 |
| Inorganic Analysis of Substances having Pharmaceutical Interest and Qualitative Analysis Laboratory | 7 | CHIM/08 |
| Organic Chemistry | 10 | CHIM/06 |
| Physiology | 11 | BIO/09 |
| Total compulsory credits | | 54 |
| 3rd COURSE YEAR (disactivated from academic year 2024/25) Core/compulsory courses/activities common | | |
| Learning activity | Ects | Sector |
| Computer Science Course | 3 | INF/01 |
| General Pathology and Pathophysiology | 11 | MED/04 |
| Medicinal Chemistry 1 | 10 | CHIM/08 |
| Metabolic and Functional Biochemistry | 8 | BIO/10 |
| Nutrition Physiology and Pharmacology, and Dietetic products | 10 | (3) BIO/09, (4) CHIM/10, (3) BIO/14 |
| PHARMACOLOGY AND PHARMACOTHERAPY | 10 | BIO/14 |
| Principles of quantitative pharmaceutical analysis and Laboratory for quantitative analysis | 8 | CHIM/08 |
| Total compulsory credits | | 60 |

| | | |
|--|-------------|------------------------|
| | | |
| 4th COURSE YEAR (disactivated from academic year 2025/26) Core/compulsory courses/activities common | | |
| Learning activity | Ects | Sector |
| Assays and methods of analysis of the Pharmacopoeias and lab of drug identification | 12 | CHIM/08 |
| Chemotherapy and biological drugs | 8 | BIO/14 |
| Medicinal Chemistry 2 | 10 | CHIM/08 |
| Pharmaceutical Technology and Legislation I and Laboratory of Pharmaceutical Technology I | 12 | CHIM/09 |
| Toxicology | 10 | BIO/14 |
| Total compulsory credits | 52 | |
| Elective courses | | |
| COSMETIC PRODUCTS | 8 | CHIM/09 |
| Drug development and scientific communication | 8 | BIO/14 |
| Drugs and innovation | 8 | BIO/14 |
| Experimental laboratory | 8 | ND |
| Hormones/phytohormones and Metabolic diseases | 8 | (4) MED/13, (4) MED/05 |
| Pharmaceutical market and Regulatory aspects of health products | 8 | CHIM/09 |
| PHYTOPHARMACY | 8 | BIO/14 |
| 5th COURSE YEAR Core/compulsory courses/activities common | | |
| Learning activity | Ects | Sector |
| APPLIED PHARMACOLOGY | 7 | BIO/14 |
| Pharmaceutical Technology and Legislation II and Lab of Pharmaceutical Technology II Medical Devices and Cosmetic prod | 12 | CHIM/09 |
| Toxicological Chemistry and Laboratory of Chemical and Toxicological Analysis | 6 | CHIM/08 |
| Total compulsory credits | 25 | |
| End of course requirements | | |
| FINAL EXAM | 15 | NA |
| Professional training in pharmacy (first part) | 10 | NA |
| Professional training in pharmacy (second part) | 20 | ND |
| Total compulsory credits | 45 | |

COURSE PROGRESSION REQUIREMENTS

The attendance at the laboratory courses is mandatory and it is mandatory the enrollment to such laboratories. For the modality and timing of the enrollment in laboratory courses, students must carefully consult the website of the Degree Course <https://www.unimi.it/it/corsi/corsi-di-laurea/farmacia-ciclo-unico>, and the Ariel website of the teachers, who is responsible for the specific laboratory.

ADMISSION TO LABORATORIES

The admission to the LABORATORY QUALITATIVE OF ANALYSIS is subordinate to passing the exam of GENERAL AND INORGANIC CHEMISTRY, AND STOICHIOMETRY, by February 28 of the academic year of attendance of the laboratory itself.

The admission to the LABORATORY OF QUANTITATIVE ANALYSIS is subordinate to the attendance (not to passing the exam) of the LABORATORY QUALITATIVE OF ANALYSIS. Since the LABORATORY OF QUANTITATIVE ANALYSIS is dispensed in the second semester, the laboratory of qualitative analysis can be attended in the first semester of the same academic year.

The admission to the LABORATORY OF DRUG IDENTIFICATION is subordinate to passing the exam of the PHARMACEUTICAL AND TOXICOLOGICAL CHEMISTRY I by January 31st and to the attendance (not to passing the exam) of the LABORATORY OF QUANTITATIVE ANALYSIS.

The admission to the LABORATORY OF PHARMACEUTICAL TECHNOLOGY I is subordinate to passing the exam of ORGANIC CHEMISTRY and to the attendance (not passing the exam) of the LABORATORY OF QUANTITATIVE ANALYSIS.

The admission to the LABORATORY OF PHARMACEUTICAL TECHNOLOGY II is subordinate to the attendance (not passing the exam) of the LABORATORY OF PHARMACEUTICAL TECHNOLOGY I.

The admission to the LABORATORY OF CHEMICAL AND TOXICOLOGICAL ANALYSIS is subordinate to the attendance (not the passing of the exam) of the LABORATORY OF DRUG IDENTIFICATION.

PREREQUISITES TO EXAMS

Concerning the prerequisites for the exams, students can take the exams listed in the left column of the table below only after

having passed the exams reported in the right column.

Removal of prerequisites to exams - If an exam is not included in the right column of the Student Information Booklet, but it was reported in the Student Information Booklets of previous academic years, the removal of this prerequisite is extended to all students, regardless of their year of enrollment.

Addition of prerequisites to exams - If new prerequisites to exams are inserted in the Student Information Booklets, students must respect them if they are present in the Student Information Booklets of the academic year preceding the one in which they take the exam.

| Learning activity | Prescribed foundation courses | O/S |
|--|---|-----------------|
| APPLIED PHARMACOLOGY | PHARMACOLOGY AND PHARMACOTHERAPY | Core/compulsory |
| PHARMACOLOGY AND PHARMACOTHERAPY | General Biochemistry | Core/compulsory |
| | Physiology | Core/compulsory |
| | General Pharmacology and Pharmacognosy | Core/compulsory |
| Metabolic and Functional Biochemistry | General Biochemistry | Core/compulsory |
| General Biochemistry | General and Inorganic Chemistry and Stoichiometry | Core/compulsory |
| | Animal Biology | Core/compulsory |
| Medicinal Chemistry 2 | Medicinal Chemistry 1 | Core/compulsory |
| Medicinal Chemistry 1 | Organic Chemistry | Core/compulsory |
| | Physiology | Core/compulsory |
| Organic Chemistry | General and Inorganic Chemistry and Stoichiometry | Core/compulsory |
| General Pathology and Pathophysiology | General Biochemistry | Core/compulsory |
| | Physiology | Core/compulsory |
| Nutrition Physiology and Pharmacology, and Dietetic products | General Biochemistry | Core/compulsory |
| | Physiology | Core/compulsory |
| | General Pharmacology and Pharmacognosy | Core/compulsory |
| Pharmaceutical Technology and Legislation I and Laboratory of Pharmaceutical Technology I | PHARMACOLOGY AND PHARMACOTHERAPY | Core/compulsory |
| | Medicinal Chemistry 1 | Core/compulsory |
| | Physiology | Core/compulsory |
| Toxicological Chemistry and Laboratory of Chemical and Toxicological Analysis | Assays and methods of analysis of the Pharmacopoeias and lab of drug identification | Core/compulsory |
| Assays and methods of analysis of the Pharmacopoeias and lab of drug identification | Medicinal Chemistry 1 | Core/compulsory |
| | Principles of quantitative pharmaceutical analysis and Laboratory for quantitative analysis | Core/compulsory |
| Principles of quantitative pharmaceutical analysis and Laboratory for quantitative analysis | Inorganic Analysis of Substances having Pharmaceutical Interest and Qualitative Analysis Laboratory | Core/compulsory |
| Inorganic Analysis of Substances having Pharmaceutical Interest and Qualitative Analysis Laboratory | General and Inorganic Chemistry and Stoichiometry | Core/compulsory |
| | Analytical Chemistry | Core/compulsory |
| Physiology | General and Inorganic Chemistry and Stoichiometry | Core/compulsory |
| | Animal Biology | Core/compulsory |
| | Physics | Core/compulsory |
| | Calculus and Statistics | Core/compulsory |
| | Human Anatomy | Core/compulsory |
| APPLIED MICROBIOLOGY AND HYGIENE | Animal Biology | Core/compulsory |
| | Human Anatomy | Core/compulsory |
| Hormones/phytohormones and Metabolic diseases | General Pathology and Pathophysiology | Core/compulsory |
| Drug development and scientific communication | PHARMACOLOGY AND PHARMACOTHERAPY | Core/compulsory |
| PHYTOPHARMACY | PHARMACOLOGY AND PHARMACOTHERAPY | Core/compulsory |
| Pharmaceutical market and Regulatory aspects of health products | PHARMACOLOGY AND PHARMACOTHERAPY | Core/compulsory |
| Pharmaceutical Technology and Legislation II and Lab of Pharmaceutical Technology II Medical Devices and Cosmetic prod | Medicinal Chemistry 2 | Core/compulsory |
| | Pharmaceutical Technology and Legislation I and Laboratory of Pharmaceutical Technology I | Core/compulsory |
| | Chemotherapy and biological drugs | Core/compulsory |
| General Pharmacology and Pharmacognosy | Animal Biology | Core/compulsory |
| | Plant Biology and Pharmaceutical botany | Core/compulsory |
| | Human Anatomy | Core/compulsory |
| COSMETIC PRODUCTS | PHARMACOLOGY AND PHARMACOTHERAPY | Core/compulsory |
| Drugs and innovation | General Pharmacology and Pharmacognosy | Core/compulsory |
| Toxicology | PHARMACOLOGY AND PHARMACOTHERAPY | Core/compulsory |
| Chemotherapy and biological drugs | PHARMACOLOGY AND PHARMACOTHERAPY | Core/compulsory |
| | APPLIED MICROBIOLOGY AND HYGIENE | Core/compulsory |