

# UNIVERSITY OF MILANO - BICOCCA DEPARTMENT OF MATERIALS SCIENCE

# Master's Degree Program in Optometry and Vision Science (Class LM-17) Annual Study Manifesto A.Y. 2025-2026

## 1. Educational program

The following tables illustrate the teaching and educational activities activated in the Academic Year 2025/2026:

FIRST YEAR (For students enrolling in the A.Y. 2025/2026 - Didactic Regulations A.Y. 2025/2026)	CFUs	SSD	Semester		
Compulsory Teaching Activities					
History and techniques of contemporary optometry - F1702Q002	6	FIS/08	First Semester		
Mathematical and computational methods for optics - F1702Q006	6	FIS/02	First Semester		
Optometric investigative techniques - I - F1702Q001	6	FIS/07	First Semester		
Psychometrics and quantitative methods - F1702Q023	6	M-PSI/03	Second Semester		
Physics of vision - F1702Q004	6	FIS/03	First Semester		
Visual ergonomics - F1702Q003	6	FIS/01	First Semester		
Multiple-choice Teaching Activities (12 CFUs): choose two activities among the following ones					
Adaptive optics - F1702Q010	6	FIS/07	Second Semester		
Materials spectroscopy and microscopy - F1702Q011	6	FIS/01	Second Semester		
Optometric investigative techniques - II - F1702Q007	6	FIS/07	Second Semester		
Optometry and low vision - F1702Q008	6	FIS/07	Second Semester		
Specialty contact lenses - F1702Q009	6	FIS/07	Second Semester		
Foreign language (3 CFUs): choose one "Further linguistic knowledge" activity among the following ones					
Further linguistic knowledge - English - C1 level (or higher) - F1702Q017	3				
Further linguistic knowledge -French - B2 level (or higher) - F1702Q019	3				
Further linguistic knowledge - German - B2 level (or higher) - F1702Q020	3				
Further linguistic knowledge - Spanish - B2 level (or higher) - F1702Q021	3				
Further linguistic knowledge - Italian - A2 level (or higher) - F1702Q022	3				
Free-choice activities (12 CFUs)					
Chosen activities	12				

SECOND YEAR (for students enrolled in the A.Y. 2024/2025 – <u>Didactic Regulations A.Y.</u> 2024/2025)	CFUs	SSD	Semester		
Optical properties of materials - F1702Q012	6	FIS/03	First Semester		
Stage - F1702Q018	25				
Final examination - F1702Q016	20				
Multiple-choice Teaching Activities (6 CFUs): choose one activity among the following ones					
Introduction to digital imaging and computer vision - F1702Q013	6	INF/01	First Semester		
Virtual and augmented reality - F1702Q015	6	INF/01	Second Semester		
Visual neurosciences - F1702Q014	6	M-PSI/02	First Semester		

#### 2. Enrolment

Detailed information on deadlines, application procedure and enrolment procedure is available at <a href="https://www.unimib.it/graduate/optometry-vision-science">https://www.unimib.it/graduate/optometry-vision-science</a> or on the Master's Degree program's e-learning webpage: <a href="https://elearning.unimib.it/course/index.php?categoryid=10900">https://elearning.unimib.it/course/index.php?categoryid=10900</a>.

#### Admission requirements

In order to be eligible for admission to the Master's Degree program in Optometry and Vision Science, candidates must hold:

- a Bachelor's degree in the L-30 class of Physical Sciences and Technologies (ex DM 270/04) or Class 25 of Physical Sciences and Technologies (ex DM 509/99) or a foreign academic qualification acknowledged as suitable. Candidates holding a Bachelor's degree in a different class must have at least 30 CFUs in the scientific-disciplinary sectors FIS/01 Experimental Physics, FIS/03 Matter Physics, and FIS/07 Applied Physics (to cultural heritage, environment, biology, and medicine);
- the English language proficiency equal to or higher than level B2.

## Admission procedure

The access to the Master's degree program in Optometry and Vision Science is by selection.

In order to be eligible for admission to the Master's Degree program, candidates must:

- hold specific curricular requirements;
- hold the English language proficiency equal to or higher than level B2;
- demonstrate adequate personal preparation, assessed through an interview, and rank favourably in the merit ranking.

The curricular requirements required for the access are:

- a Bachelor's degree in the L-30 class of Physical Sciences and Technologies (ex DM 270/04) or Class 25 of Physical Sciences and Technologies (ex DM 509/99);
- 30 CFUs in the scientific-disciplinary sectors FIS/01 Experimental Physics, FIS/03 Matter Physics, and FIS/07 Applied Physics (to cultural heritage, environment, biology, and medicine), for those candidates with a Bachelor's degree in a different class.

On the basis of the documentation submitted by the candidate, a specific committee will check the candidate's possession of the curricular requirements and the level of English language proficiency, in order to admit him/her to the interview which is aimed at assessing his/her personal preparation.

The requirement of English language proficiency is considered met if the candidate (the following options are alternatives):

a) holds a certification, recognized by the University of Milano-Bicocca, corresponding to English language at B2 level or higher;

- b) has obtained the Open Badge Bbetween English B2 level from the University of Milano-Bicocca or has passed in his/her previous academic career an English language exam with a level equal to B2;
- c) has obtained level B2 English by taking the University of Milano-Bicocca language test;
- d) has obtained a degree awarded entirely or predominantly in English.

The admission interview, to which only candidates meeting the curricular requirements and the English language proficiency will be admitted, will be held in English and will focus on topics in the following macroareas:

- arithmetic and algebra, trigonometry, exponentials and logarithms, complex numbers, functions of one and two real variables, derivatives and integrals, first- and second-order differential equations;
- physical quantities and their measurement, classical kinematics and dynamics;
- classical electromagnetism, electromagnetic waves, interference and diffraction;
- geometric optics in paraxial approximation and basic elements of geometric models of ocular optics;
- anatomy and physiology of the visual apparatus;
- ophthalmic optics: lens measuring instruments and centring an eyeglass;
- basic concepts of optometry: elements of refractive examination, instruments for measuring and assessing ocular structures, basic concepts for fitting soft and rigid contact lenses.

Further details on interview topics are available in the respective syllabus published on the Master's Degree program's e-learning webpage: <a href="https://elearning.unimib.it/course/view.php?id=53817">https://elearning.unimib.it/course/view.php?id=53817</a>.

The interview will be assessed by means of a parameter (A), a value ranging from 0 to 30, on the basis of the candidate's knowledge of the topics on which the interview will focus. The outcome of the personal preparation assessment will be considered positive if  $A \ge 18$ .

## 3. Organization of the Master's Degree Program

## 1. Credits recognition and transfer procedures

#### A. Transfer from another University

In the event of transfer from another University, the recognition of any examinations taken in the previous career is carried out by the Teaching Coordination Council (CCD, Consiglio di Coordinamento Didattico) on the proposal of the Study Plan Commission, appointed by the CCD, on the basis of conformity between the contents of the program of origin and the contents of the program to which access is sought. Partial recognition of a course is admissible.

In the event of a student's transfer from another Master's Degree Program belonging to Class LM-17, the amount of CFUs relative to the same scientific-disciplinary area (SSD) which is directly recognized to the student cannot be lower than 50% of the already hold credits. (DM March 16, 2007).

The activities that have been already recognized as credits in Bachelor's Degree Programs cannot be further considered as CFUs in Master's Degree Programs.

Information on transfer's application procedures is published on the University website, at the following webpage: <a href="https://www.unimib.it/servizi/segreterie-studenti/passaggi-trasferimenti-e-rinunce">https://www.unimib.it/servizi/segreterie-studenti/passaggi-trasferimenti-e-rinunce</a>.

#### B. Extracurricular credit recognition

Pursuant to DM 931/2024, in the context of Master's Degree programs, Universities may recognize as credits (CFUs) the extracurricular activities, up to a maximum of 24 CFUs. The activities that have been already recognized as credits in Bachelor's Degree Programs cannot be further considered as CFUs in Master's Degree Programs. Recognition is made solely on the basis of the skills demonstrated by each student. Collectively awarded forms of recognition are excluded.

## 2. Part-time pre-enrolment

As alternative to the full-time pre-enrolment there is the part-time pre-enrolment. The student may pre-enrol part-time according to the modalities defined at Art. 12 of the Student Regulations, available at <a href="https://www.unimib.it/sites/default/files/2023-11/reg-stud">https://www.unimib.it/sites/default/files/2023-11/reg-stud</a> Versione%20sito.pdf.

The part-time pre-enrolment intends to guarantee students who cannot attend continuously the possibility of extending their Master's Degree program for a number of years equal to twice its normal duration.

The educational path is indicated in the Didactic Regulations and it cannot be changed.

According to the aforementioned Regulations, the number of credits that can be acquired cannot exceed the number indicated for each year, even there are validations, recognitions or examinations not taken in previous years.

Switching from part-time to full-time pre-enrolment and vice versa is possible only once during the university career.

A 50% reduction in the single university fee is granted to students who opt for part-time pre-enrolment. The reduction applies for a number of years equal to twice the normal duration of the degree program.

### 3. Contemporary pre-enrolment

According to the legislation in force, the student can pre-enrol simultaneously in two different high education programs, in order to obtain two different academic titles (see art. 20 of the <u>Didactic Regulations of the University</u>).

Information on application procedures and fees can be found on the University website, at the following webpage: <a href="https://www.unimib.it/servizi/studenti-e-laureati/segreterie/contemporanea-iscrizione-due-corsi-studio">https://www.unimib.it/servizi/studenti-e-laureati/segreterie/contemporanea-iscrizione-due-corsi-studio</a>.

#### 4. Pre-enrolment in the years subsequent to the first one

For information on pre-enrolment in the years subsequent to the first one, please see the following webpage: <a href="https://www.unimib.it/servizi/studenti-e-laureati/segreterie/rinnova-liscrizione">https://www.unimib.it/servizi/studenti-e-laureati/segreterie/rinnova-liscrizione</a>.

#### 5. Class schedule

Classes will take place in the following didactic periods:

First Semester: November 29, 2025 – January 30, 2026

**Didactic break:** November 10, 2025 – November 14, 2025 (only for the second year)

**Second semester:** March 2, 2026 – June 26, 2026

**Didactic break:** May 4, 2026 – May 8, 2026 (for all years of the program)

Class schedule will be published on the University website at: http://gestioneorari.didattica.unimib.it/PortaleStudentiUnimib/.

It is possible to download the Official University App too: BicoccAPP.

#### 6. Teaching programs and professors' reception hours

Teaching programs (Syllabus) as well as information on the organization of teachings and professors' reception hours are available on the Master's Degree program's e-learning webpage: https://elearning.unimib.it/course/index.php?categoryid=10902.

## 7. Submission of the study plan

The study plan is the specific educational pathway that the student must present and follow in order to achieve the Degree.

When enrolling, the student is automatically assigned a study plan called statutory plan, which includes all compulsory educational activities. Subsequently, the student will be required to submit a personal study plan, indicating his/her choices in terms of multiple-choice activities and free-choice activities.

The study plan is approved by the Teaching Coordination Council.

The student's right to take the exam of a teaching activity depends on the presence of the activity itself in the last approved study plan.

The study plan must respect the number of credits to be acquired, the constraints and the rules of propaedeuticity, where provided for, in accordance with the Didactic Regulations.

The student is allowed to create his/her personal study plan including additional educational activities, which are different to the ones required by the Didactic Regulations, as long as they are coherent with the Degree's Program Didactic System of the academic year of enrolment and they are approved by the Teaching Coordination Council as congruous with the educational objectives of the Master's Degree Program.

The deadlines and the procedures related to the submission of the study plan are defined by the University.

The periods reserved for the submission of the study plan are specified in the following webpage <a href="https://www.unimib.it/servizi/studenti-e-laureati/segreterie/piani-degli-studi/area-scienze">https://www.unimib.it/servizi/studenti-e-laureati/segreterie/piani-degli-studi/area-scienze</a> and on the Program's e-learning platform <a href="https://elearning.unimib.it/course/index.php?categoryid=10900">https://elearning.unimib.it/course/index.php?categoryid=10900</a>

For what is not provided for by this article, please see the **Student Regulations**.

## 8. Further linguistic knowledge (DM 270/2004 Art.10, paragraph 5, letter d)

The acquisition of 3 CFUs of "Further Linguistic Knowledge" takes place as described below:

#### ITALIAN students:

- by passing a University test of foreign language proficiency at B2 level. The foreign language cannot be the English language: the student has to choose among French, Spanish or German. OR
- by passing the University test of English language proficiency at C1 level.

Italian students will be entitled to the exemption from the test and the recognition of the expected CFUs if they already held the University of Milano-Bicocca's Open Badge or certifications issued by accredited bodies attesting French/Spanish/German language proficiency at B2 level or higher or attesting English language proficiency at C1 level or higher.

#### FOREIGN students:

- by passing the A2 level Italian language test organized by the University of Milano-Bicocca.

Foreign students will be entitled to the exemption from the language test and the recognition of the expected CFUs if they already held the University of Milano-Bicocca's Open Badge or certifications issued by accredited bodies attesting Italian language proficiency at A2 level or higher.

Information on language test's procedures and the acquisition of CFUs is defined at University level and it will be available on the University website at the following link: <a href="https://www.unimib.it/didattica/opportunita/lingue-unimib/idoneita-ateneo-e-accertamento-linguistico">https://www.unimib.it/didattica/opportunita/lingue-unimib/idoneita-ateneo-e-accertamento-linguistico</a>

## 9. Free-choice activities (DM 270/2004, Art. 10, paragraph 5, letter a)

The student is required to obtain 12 CFUs in the "free-choice activities". The student can freely choose the "free-choice activities" among the teaching activities not selected of the Master's Degree program in Optometry and Vision Science and the teaching activities offered by other Master's Degree programs activated in the University of Milano-Bicocca.

Since the free-choice activities are an integral part of the study plan, they must be approved by the Teaching Coordination Council (CCD, Consiglio di Coordinamento Didattico), who will verify their consistency with the educational project and decree its conformity with the objectives of the Master's Degree program.

According to the legislation in force, for calculating the total number of exams, the "free-choice activities" are considered as a single examination.

#### 10. Extra credits

Students enrolled in Bachelor's Degree Program, Master's Degree Program or Single-cycle Master's Degree Program may include in their study plan one or more teaching activities (extra credits) in addition to those required for the academic title's achievement, up to a maximum of 16 CFUs.

CFUs and marks of additional teaching activities will not be counted in the final average exam grade, but they will be reported in the student's career.

These credits may be recognized for the purpose of shortening a Master's degree program only if the courses are provided by a Master's degree program and if they have not been previously assessed as curricular requirements for access purposes.

For what is not provided for by this article, please refer to the **Student Regulations** 

#### 11. Exams

Details on the assessment methods of every single teaching activity included in the educational program can be found in the respective syllabus. Syllabi are published on the Master's Degree program's e-learning webpage, at <a href="https://elearning.unimib.it/course/index.php?categoryid=10902">https://elearning.unimib.it/course/index.php?categoryid=10902</a>.

The exam session calendar is available on the University website at

https://gestioneorari.didattica.unimib.it/PortaleStudentiUnimib/index.php?view=easytest&\_lang=en or in the Exam Session Board: https://s3w.si.unimib.it/ListaAppelliOfferta.do?.

Registration for exams takes place via Segreterie OnLine: <a href="https://s3w.si.unimib.it/Home.do">https://s3w.si.unimib.it/Home.do</a>.

The number of examinations is not less than that stipulated in the current Didactic Regulations of the University available at: https://www.unimib.it/sites/default/files/2023-11/rda-VERSIONE%20SITO.pdf.

#### 12. Final examination

The final examination to obtain the academic degree consists of the presentation of a thesis developed in an original manner by the student under the guidance of a supervisor in the field of Optometry and Vision Science. The thesis, written and discussed in English, will focus on a topic related to the experimental, theoretical, and/or computational activities carried out during the internship. The final examination aims to assess the ability to analyse and understand the topic under discussion, present its main aspects and publicly discuss it with clarity, knowledge and critical sense.

More information on the final examination, the deadlines and the title achievement session calendar is published on the Master's Degree program's e-learning webpage: https://elearning.unimib.it/course/index.php?categoryid=10901.

#### 13. Contacts

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Master's Degree program's e-learning webpage:

https://elearning.unimib.it/course/index.php?categoryid=10900.

For what is not provided for by this document, please see the Didactic Regulations of the Program of the academic year of enrolment, available on the Program's website: https://elearning.unimib.it/course/view.php?id=53816.