UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2025/26
MASTER DEGREE
VETERINARY BIOTECHNOLOGY SCIENCES (Classe LM-9 R)
Enrolled in 2025/2026 academic year

HEADING

Degree classification - Denomination and code:	LM-9 R
Degree title:	Dottore Magistrale
Curricula currently available:	GAMETES, CELLS, TISSUES: APPLICATIONS FOR REPRODUCTION AND THERAPY / ADVANCED TECHINIQUES FOR DISEASE CONTROL AND BIOSAFETY
Length of course:	2 years
Credits required for admission:	180
Total number of credits required to complete programme:	120
Years of course currently available:	1st
Access procedures:	Open, subject to entry requirements
Course code:	HBA

PERSONS/ROLES

Head of Degree Course Coordination Council / Board

Prof. Michele Mortarino

Tutors - Faculty

Tutor per l'orientamento: Prof.sa Lauretta Turin, Prof. Michele Mortarino

Degree Course website

https://biotecnologiaveterinaria.cdl.unimi.it/it

La segreteria è aperta al pubblico previo appuntamento tramite il servizio informastudenti nei giorni: Mercoledì 9:00 - 12:00 tramite piattaforma Teams Giovedì 13:00 - 15:00 in presenza https://www.unimi.it/it/studiare/servizi-gli-studenti/segreterie-informastudenti

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 organisations.

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

The University of Milan is a member of the 4EU+ European University Alliance that brings together eight public multidisciplinary universities: University of Milan, Charles University of Prague, Heidelberg University, Paris-Panthéon-Assas University, Sorbonne University of Paris, University of Copenhagen, University of Geneva, and University of Warsaw. The 4EU+ Alliance offers integrated educational pathways and programmes to promote the international mobility of students (physical, blended and virtual).

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, 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 organises 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;
Student Desk booking through InformaStudenti

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

Learning activity	Ects	Sector
Biotechnologies: experimental models in research	12	(4) VET/07, (5) AGR/18, (3) AGR/20
Cellular communication and signal transduction	10	(6) BIO/10, (4) BIO/09
EPIDEMIOLOGY, BIOSTATISTICS AND BIOINFORMATICS	8	(3) AGR/17, (5) VET/05
Etiopathogenesis of hereditary and parasitic diseases	6	(3) VET/06, (3) AGR/17
Microbiologia molecolare	10	(4) MED/04, (3) BIO/19, (3) MED/07
Morphological and molecular basis of the Central Nervous System and its Pathologies	8	(5) VET/01, (3) VET/03
Omics	10	(7) BIO/10, (3) BIO/18
Total compulsory credits	64	

2nd COURSE YEAR (available as of academic year 2026/27) Core/compulsory courses/activities common to all curricula

Learning activity	Ects	Sector
Final examination	19	NA
Total compulsory credits	19	

Elective courses common to all curricula

In the II year, integrated courses will be activated courses (eight credits) aimed to offer students the opportunity to further deepen preparation in specific areas of Biotechnological Veterinary Sciences and can be chosen by the students. The acquisition of the eight CFU is subject to passing the related tests by the students, with the vote of thirty.
The 'Scientific Innovation and Legal Challenges of Food Regulation' course is included in the 'Jean Monnet' internationalization project, and it accounts for 6 ECTS credits and 42 hours. This will be complemented with 6 hours of biotechnological seminar activities, resulting in a total of 48 hours. Consequently, the student must gain at least an additional 2 ECTS credits through another elective educational activity.

Anti-Aging: biotechnological comparative approaches	8	(1) BIO/10, (5) VET/01, (2) VET/03
Biobanking	8	(5) VET/09, (3) VET/10
Biotechnological diagnostic tools into the clinical medicine of dog and cat	8	(3) VET/08, (3) VET/01, (2) BIO/12
Biotechnologies for innovation and sustainability of animal health and production	8	(3) VET/07, (3)

		AGR/18, (2) VET/06
Environmental stress and food chain: molecular approaches	8	(2) AGR/19, (2) BIO/10, (2) VET/06, (2) VET/04
Extracellular vesicles signalling in reproduction: the rabbit as an animal model	8	(2) VET/01, (3) VET/10, (3) VET/02
From 3D-culture and 3D-printing to organoids	8	(3) AGR/18, (2) VET/09, (3) VET/01
Molecular pathology and parasitology	8	(2) VET/06, (6) VET/03
Nutrition and biodiversity in gut microbiota/health	8	(6) AGR/18, (2) VET/05
Scientific innovation and legal challenges of food regulation	6	(2) AGR/18, (4) IUS/08
Vaccinology	8	(2) AGR/18, (6) VET/05

Further elective courses common to all curricula

MANDATORY ACTIVITIES COMMON TO ALL CURRICULA.

The student has to obtain 3 cfu as languages skills

ACTIVE CURRICULA LIST

GAMETES, CELLS, TISSUES: APPLICATIONS FOR REPRODUCTION AND THERAPY Course years currently available: 1st
ADVANCED TECHINIQUES FOR DISEASE CONTROL AND BIOSAFETY Course years currently available: 1st

CURRICULUM: [HBA-A] GAMETES, CELLS, TISSUES: APPLICATIONS FOR REPRODUCTION AND THERAPY

2nd COURSE YEAR (available as of academic year 2026/27) Core/compulsory courses/activities Curriculum-specific features GAMETES, CELLS, TISSUES: APPLICATIONS FOR REPRODUCTION AND THERAPY

Learning activity		Ects	Sector
Biotechnologies applied to Reproduction, Development and Regenerative Medicine		12	(6) VET/01, (6) VET/10
Functional genomics and the molecular basis of differentiation		8	(4) VET/06, (4) AGR/17
In Vitro Model Technologies		6	(3) VET/07, (1) VET/01, (2) VET/02
	Total compulsory credits	26	

CURRICULUM: [HBA-B] ADVANCED TECHINIQUES FOR DISEASE CONTROL AND BIOSAFETY

2nd COURSE YEAR (available as of academic year 2026/27) Core/compulsory courses/activities Curriculum-specific features ADVANCED TECHINIQUES FOR DISEASE CONTROL AND BIOSAFETY

Learning activity		Ects	Sector
From cell to farm: methods and technologies applied to animal nutrition and food quality		10	(5) AGR/19, (5) AGR/18
Molecular Virology		8	(3) VET/03, (5) VET/05
Research strategies and methodologies applied to disease study and control		8	(5) VET/06, (3) VET/05
	Total compulsory credits	26	