



**UNIVERSITA' DEGLI STUDI DI MILANO**  
**PROGRAMME DESCRIPTION - ACADEMIC YEAR 2023/24**  
**BACHELOR**  
**Animal Production (Classe L-38)**  
**Enrolled from 2021/2022 accademic year**

### **HEADING**

<b>Degree classification - Denomination and code:</b>	L-38 Animal husbandry
<b>Degree title:</b>	Dottore
<b>Curricula currently available:</b>	Intensive farming / Extensive farming
<b>Length of course:</b>	3 years
<b>Total number of credits required to complete programme:</b>	180
<b>Years of course currently available:</b>	1st , 2nd , 3rd
<b>Access procedures:</b>	Cap on student, student selection based on entrance test
<b>Course code:</b>	H16

### **PERSONS/ROLES**

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

prof. Vittorio Maria Moretti

#### **Tutors - Faculty**

Tutor per l'orientamento: prof. Valerio Bronzo  
Tutor per la mobilità internazionale e l'Erasmus: prof. Gabriele Brecchia  
Tutor per i piani di studio: prof.ssa Lisa Vallone  
Tutor per stage e tirocini: prof.ssa Luisa Zaniboni  
Tutor per laboratori e altre attività: prof.ssa Anna Lange Consiglio  
Tutor per tesi di laurea: prof.ssa Alessia Giordano  
Tutor per trasferimenti: prof. Vittorio Maria Moretti  
Tutor per riconoscimento crediti: prof. Vittorio Maria Moretti

#### **Degree Course website**

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

Via dell'Università 6 Lodi La segreteria è aperta al pubblico previo appuntamento tramite il servizio informastudenti nei seguenti giorni: martedì dalle 13 alle 15 tramite piattaforma Teams - mercoledì dalle 9 alle 12 tramite piattaforma Teams - giovedì dalle 13 alle 15 in presenza. <https://www.unimi.it/it/studiare/servizi-gli-studenti/segreterie-informastudenti>

### **CHARACTERISTICS OF DEGREE PROGRAMME**

#### **General and specific learning objectives**

The bachelor degree program in Animal Production contains theoretical knowledge and enables the acquisition of the necessary practical skills needed to work in animal farms as experts in animal breeding and genetics, nutrition, growth, behavior and management, with particular reference to the protection of animal welfare and the reduction of the environmental impact of farming activities.

The course provides knowledge and practical skills useful for the management of farms and livestock breeding. Graduates are able to assess the productive and functional attitudes of farmed animals, taking into account environmental, ethical and economic factors and in compliance with current legislation. Graduates manage the growth stages and are able to formulate feed for all food producing animals. They have also the skills to perform cost and profitability analysis of livestock farms and to address and manage aspects related to the processing of food of animal origin, hygiene and quality control.

#### **Professional profile and employment opportunities**

The graduate in Animal Production works as an employee and / or entrepreneur and / or consultant in:

- Animal farms;
- Genetic centers and breeders associations;
- Companies that produce apparatus, structures and equipment for animal husbandry;
- Food processing companies and food distribution system;
- Feed companies, dairy and meat industries, slaughterhouses;
- Companies providing services (genetic, nutritional, reproductive) to animal farms;
- Veterinary drug industry;

- PDO consortia and professional organizations;
- Public territorial bodies;
- Laboratories for the control of the quality and safety of animal feed and food of animal origin;
- National and international organizations.

## Notes

In order to get their degree, students are required to certify their knowledge of the English language at the B1 level. This level can be certified in one of the following ways:

- By submitting their language certificate, taken no more than 3 years before its submittal and attesting a B1 or higher level (for the list of the language certificates which are accepted by the University of Milan, please refer to the website: <http://www.unimi.it/studenti/100312.htm>).

Students can submit their language certificate during the immatriculation procedure or send it to the Language Centre of the University of Milan

(SLAM) via the Infostudente service.

- By sitting the placement test run by SLAM, during the first year exclusively, from September to December. Should they not pass the Placement Test, students will have to attend the English language course organized by SLAM. All students who do not have a valid language certificate must sit the Placement Test. Those students who do not sit the Placement test by December or do not pass the end of course test in one of the 6 attempts granted will have to get a language certificate outside the University of Milan within their degree.

## **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.

### **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 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/>

<b>1st COURSE YEAR Core/compulsory courses/activities common to all curricula</b>		
<b>Learning activity</b>	<b>Ects</b>	<b>Sector</b>
Agronomy and herbaceous crops	6	AGR/02
Anatomy of farm animals	8	VET/01
Biochemistry	6	BIO/10
Chemistry and principles of biology	11	(6) AGR/17, (5) CHIM/03, (6) BIO/05, (5) CHIM/06
Economics	6	AGR/01
English assessment B1 (3 ECTS)	3	ND
Mathematic and physics	10	(6) MAT/09, (6) MAT/01, (4) FIS/08, (6) MAT/02, (4) FIS/07, (6) MAT/03, (4) FIS/06, (6) MAT/04, (4) FIS/05, (4) FIS/04, (6) MAT/05, (4) FIS/03, (6) MAT/06, (4) FIS/02, (6) MAT/07, (4) FIS/01, (6) MAT/08
Physiology of farm animals	7	VET/02
Total compulsory credits		57
<b>2nd COURSE YEAR Core/compulsory courses/activities common to all curricula</b>		
<b>Learning activity</b>	<b>Ects</b>	<b>Sector</b>
Animal nutrition, nutritional evaluation of feed and feed technology	7	AGR/18
Genetics and poultry science	12	(6) AGR/17, (6) AGR/20
Livestock farming and welfare	8	AGR/19
Management economics and marketing of food products	6	AGR/01
Microbiology and hygiene	12	(6) VET/04, (6) VET/05
Rural buildings and mechanization	12	(6) AGR/09, (6) AGR/10
Total compulsory credits		57
<b>3rd COURSE YEAR Core/compulsory courses/activities common to all curricula</b>		
<b>Learning activity</b>	<b>Ects</b>	<b>Sector</b>
Final examination	3	NA
Parasitology and toxicology	12	(6) VET/07, (6) VET/06
Pathology and reproduction	12	(6) VET/10, (6) VET/03
Practical training	3	NA
Total compulsory credits		30
<b>Further elective courses common to all curricula</b>		
<b>In the third year of the course the student will have to choose 12 credits among the teachers active at the university consistent with the training plan.</b>		
Alternative, innovative and unconventional feeds	3	AGR/18
Analysis of food of animal origin for food safety purposes	3	VET/04
Animal nutrition and food safety: the Gap between Science and Public Opinion.	3	AGR/18
Basic concepts of molecular pathology	3	VET/03
Biochemical techniques for the analysis laboratory	3	BIO/10
Breeding management of poultry local breeds	3	AGR/20
Breeds and products of animal origin	3	AGR/17
Ecoparasitology and interaction between domestic and wild animals	3	VET/06
Evolution of petfood palatability	3	AGR/18
Feed Legislation	3	VET/08
Laboratory methods for infectious diseases prevention	3	VET/05
Management of animals in Animal Assisted Interventions	3	AGR/19
Management of animals in Animal Assisted Interventions	3	VET/02
Neonatal management in dogs, cats and horses	3	VET/10
Nutritional innovations and animal welfare	3	AGR/18
Physiology, Behaviour and Welfare of Dogs and Cats in their interactions with humans.	3	VET/02
Practical aspects to interact and manage efficiently the beef and dairy cattle farms	3	AGR/18
Principles of hygiene and prevention of infectious and parasitic diseases of unconventional pets	3	(1.5) VET/06, (1.5) VET/05
Protection of the health and welfare of dogs, cats and unconventional pets	3	VET/08
Protection of the health and welfare of equids	3	VET/08
Reproductive and Embryo technologies for biodiversity preservation in companion animals	3	(1) VET/10, (2) VET/01
Small ruminants nutrition and products quality	3	AGR/18

## **ACTIVE CURRICULA LIST**

Intensive farming Course years currently available: 1°, 2°, 3°

Extensive farming Course years currently available: 1°, 2°, 3°

### Procedure for choosing a curriculum

The choice of curriculum can be made by submitting the study plan within the deadlines indicated on the site: <https://spa.cdl.unimi.it/it/studiare/presentato-piano-di-studio>

#### CURRICULUM: [H16-A] Intensive farming

<b>Further elective courses Curriculum-specific features Intensive farming</b>		
<b>In the third year of the course the student will have to choose four courses from those indicated in the following group for a total of 24 cfu.</b>		
Genomics, selection and morpho-functional evaluation	6	AGR/19, AGR/17
Hygiene and technology of food of animal origin	6	VET/04
Livestock feeding and environmental impact	6	AGR/18
Technologies for reducing environmental impact in animal husbandry	6	AGR/09
Veterinary hygiene	6	VET/05
Zootechnical legislation and food safety	6	VET/08

#### CURRICULUM: [H16-B] Extensive farming

<b>Further elective courses Curriculum-specific features Extensive farming</b>		
<b>In the third year of the course the student will have to choose four courses from those indicated in the following group for a total of 24 cfu.</b>		
Alternative farming of poultry and aquaculture	6	AGR/20
Extensive and pastoral management techniques and product quality	6	AGR/19
Extensive livestock feeding and grazing	6	AGR/18
Food safety in processing of farm food products	6	VET/04
Livestock biodiversity and agroecosystems	6	AGR/19, AGR/17
Organic animal husbandry and feeding	6	AGR/19, AGR/18

### COURSE PROGRESSION REQUIREMENTS

It is necessary that students follow a specific mandatory sequence in taking some exams, that is described below.

The Anatomy of Farm Animals and Physiology of Farm Animals exams (1st year) are preparatory to the Pathology and Reproduction and Parasitology and Toxicology exams (3rd year).

The Biochemistry exam (1st year) is preparatory for the Animal nutrition, nutritional evaluation of feed and feed technology exam (2nd year).

Learning activity	Prescribed foundation courses	O/S
Parasitology and toxicology	Physiology of farm animals	Core/compulsory
	Anatomy of farm animals	Core/compulsory
Pathology and reproduction	Physiology of farm animals	Core/compulsory
	Anatomy of farm animals	Core/compulsory
Animal nutrition, nutritional evaluation of feed and feed technology	Biochemistry	Core/compulsory