

100%
75%
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Master Degree in Food Animal Metabolism and Management in the Circular Economy

1 8 5



FAMCE AT A GLANCE

Duration:
2 years

Language:
English

Location:
Ozzano dell'Emilia (BO)

Type of access:
Open

Applicants:
**Graduates in Veterinary,
Animal or Food Science or
related fields**

Goal:
**Develop interdisciplinary
professionals who can
support the economic and
technological transition of
livestock systems and lead the
implementation of circular
economy practises**

FAMCE trains experts specialized in the management of animal production systems from a circular perspective, with a multidisciplinary approach. The learning areas of the Master Degree are: metabolism, animal health and welfare, farming systems and technologies, and circular economy. Teaching? Entirely in English!

Animal production systems experts can:

- Manage the production and organisational aspects of animal production systems according to a circular approach;
- deal with the functional and economic aspects linked to the introduction and management of technical and organisational innovations in animal production systems;
- organise the business functions, including the commercial aspects of organisations working in the animal production sector;
- perform planning and management functions for business development initiatives in the field of animal production;
- manage big data for the economic, social and environmental optimization of breeding system performances;
- develop metabolic efficiency models for the optimization of nutrient use, also with a view to disease prevention, the promotion of animal welfare and the quality of animal-derived foods;
- organise and manage aspects linked to animal feed, genetic improvement, monitoring of welfare and the promotion of health in farm animals.




































ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

DEPARTMENT
OF VETERINARY
MEDICAL SCIENCES

COURSE STRUCTURE AND STUDY PLAN AT A GLANCE

 METABOLISM, ANIMAL HEALTH AND WELFARE
  CIRCULAR ECONOMY
  FARMING SYSTEMS AND TECHNOLOGIES

1 st semester	2 nd semester	3 rd semester
  Intensive Poultry and Fish Farming Performances and Circular Economy	 Circular Agri-Food Business Models	 Artificial Intelligence and Machine Learning for Business
  Swine and Ruminant Farming in a Sustainable and Circular Agriculture	  Prevention and Monitoring of Metabolic Diseases in Intensive Animal Production	 Business Data Analysis
  Metabolism in Farm Animals	  The Impact of Drugs and Contaminants on Animal Production	  Nutrition and Feeding to Improve Food Animal Efficiency Within Circular Agricultural System
  Anatomy of the Systems of Species of Zootechnical Interest	  High-Throughput Technologies for Sustainable Animal Breeding	  Strategies to Improve Safety of Foods of Animal Origin Within Circular Agricultural System
  Physiology of Animal Metabolism and Stress	  Management of Reproduction in Sustainable Animal Productions	  Strategies to Improve Safety of Foods of Animal Origin Within Circular Agricultural System
  Stress and Dysmetabolic Associated Pathologies	  Strategies of Infectious Disease Control in Sustainable Food-Animal Productions	
	  Sustainable Control of Parasitic Diseases in Food-Animal Production Systems	

- + Each course includes practical activity which can include laboratories, students' groups, flipped classrooms, seminars, or external visits
- + Companies involvement: business seminars and courses held by professionals
- + The fourth semester is dedicated to a compulsory internship and to the preparation of the final thesis

GRADUATE PROFILE AND SOME JOB OPPORTUNITIES

- Agricultural, zootechnical and aquaculture companies
- Manufacturers of technical equipment and management systems for animal productions
- Professional and consulting firms providing animal production services and environmental services to agriculture and animal husbandry
- Technical assistance and training services for the agrifood sector
- Certification and control institutions working in the food production sector
- National and international public bodies and institutions working in the animal production sector
- Public and private research institutions and universities
- Governmental and non-governmental bodies working in agricultural development cooperation
- Producers' associations
- Freelance activities (after sitting the National exam for Agronomists and Forestry expert)
- Secondary school education
- Post graduate study (PhD programs)



<https://corsi.unibo.it/2cycle/FoodAnimalMetabolismManagement>