

Per lo sviluppo
di un'AGRICOLTURA
SOSTENIBILE, attenta
alla salvaguardia
delle risorse naturali.
Costruiamo insieme
il nostro futuro.

For the development of
a SUSTAINABLE AGRICULTURE
attentive to the preservation of
natural resources.
Let's build together our future.

AGR AR IA

Iscriviti.
Per costruire un **futuro migliore**.
Per te e per tutti.

Enroll.
To build a **better future**.
For you and for everyone.

Informazioni/ Informations:

www.di3a.unict.it
di3a@unict.it



Di3A

Dipartimento di Agricoltura,
Alimentazione e Ambiente

Master's degree in
**AGRICULTURAL SCIENCES
AND TECHNOLOGIES**

Class LM-69 Agricultural Science and Technology

Master's degree in AGRICULTURAL SCIENCES AND TECHNOLOGIES

THE COURSE AIMS TO TRAIN MASTER'S GRADUATES WHO ARE ABLE TO:

- **Analyze** and **manage** the environmental and socioeconomic factors influencing production processes;
- **understand** and **control** the biological components of the agroecosystem, both beneficial and harmful;
- **design** and apply rational systems, methods, and means of production, including unconventional ones;
- **develop** projects on the agricultural potential of the territory;
- **plan** crop arrangements and evaluate achieved results;
- **design** installations and structures necessary for plant cultivation in open air and in confined environments, as well as for livestock farming;
- **plan** and **manage** strategies for plant health protection and related products;
- **develop** projects for the protection of agricultural and forest agroecosystems, biodiversity conservation, environmental protection, and promotion of sustainable development and multifunctionality of agriculture.

The Master's degree program aims to train a professional figure who possesses a high level of basic cultural preparation, excellent mastery of the scientific investigative method, and in-depth knowledge of the agricultural environment and agroecosystems with their main variables.

Additionally, the graduate must possess specific and qualified knowledge in:

- biology, physiology, and genetics of plants and their parasites, essential for achieving qualitative-quantitative improvement of production, rational planning of defense, and soil resource conservation;
- animal physiology, feeding, essential for achieving qualitative-quantitative improvements in meat and/or dairy productions;
- quality control of the supply chain for various plant and animal productions, also considering process sustainability and biodiversity conservation;
- programming and management of research and innovative processes, both independently and in working groups, assuming project and structure responsibilities.

PROFESSIONAL ACTIVITIES

The graduate in AGRICULTURAL SCIENCES AND TECHNOLOGIES will be able to carry out professional activities in the agricultural sector, in education, and in research, in both public and private entities. They may be admitted to the state examination for registration in Section A of the Professional Register of Agronomists and Foresters.

The Course prepares for the profession of:

- Entrepreneur, administrator, manager of large companies operating in agriculture, livestock farming, and forestry;
- Entrepreneurs and managers of small agricultural enterprises;
- Agronomists and foresters;
- Specialists in management in the Public Administration;

- Specialists in the marketing of goods and services;
- Researcher and graduate technician in the field of Agricultural Sciences.

FIRST YEAR COURSES > Sustainable management of cropping systems, Management of soil organic matter, Fruitculture, Vegetable and flower crop, Agricultural mechanisation and labour organisation, Rural estate, European Agricultural and Fisheries Policy, Plant disease management, Sustainable pest control, Water resource management in agriculture.

SECOND YEAR > 4 CURRICULA:

PLANT PRODUCTIONS: Herbaceous Crop Systems (Weed management techniques and fertilisation, Biomass crops for energy), Mediterranean fruit tree crops, Protected cultivation.

PLANT PROTECTION TECHNOLOGIES: Arthropod Pest Management in Mediterranean Crops (Biological control, Integrated pest management), Biological control of plant diseases, Diagnosis in plant pathology.

ECONOMY AND PLANNING: Strategic Management of Agricultural Firms, Markets And Marketing (Strategic management of the farm, Agri-Food markets and marketing), Rural buildings design, Technologies for innovation and safety in agriculture.

ZOOTECHNICAL: Applied Animal Production (Sustainable management of animal production system, Evaluation tools for quality management in livestock), Animal breeding, Animal nutrition and feeding.

