



MASTER & MASTER OF SCIENCE PROGRAMMES IN **"MEDITERRANEAN ORGANIC AGRICULTURE"** ACADEMIC YEAR 2019-2020

OBJECTIVES

The main objective of the Master of Science Programme in "Mediterranean Organic Agriculture" is to train graduate agronomists and agricultural engineers to produce innovation in the Mediterranean organic agriculture, creating and maintaining sustainability in the farming system, assisting and contributing to the development of the Organic Sector both at national and regional level. The two-year programme is structured as follows: the 1st year is based on the completion of a series of specific one-week courses and the preparation of an individual project, whereas the 2nd year is dedicated to the development of applied research themes and experimental works.

In this framework, further goals are:

- developing agronomic skills related to practices and techniques of Mediterranean Organic Agriculture production and management;
- developing skills related to legislation, inspection, certification and labelling of organically-produced food and fibres;
- building capacity in socio-economic analysis and market strategy for organic agriculture;
- providing trainees with the necessary tools and expertise to assess agricultural, environmental, and socio-economic opportunities and constraints of organic agriculture in different Mediterranean areas.

During the second year, students who have successfully completed the first year and who have met all the prerequisites set by the Institute, draft a thesis based on experimental research work. The scientific results derived from research work are usually announced on the occasion of International Conferences and/or published in scientific journals.

ORGANIZATION First Year: 63 ECTS

- Eleven Teaching Units 56 ECTS
- Individual Project 7 ECTS

Diploma: Master / Master Universitario di I livello Duration: 9 months

Second Year: 60 ECTS

- Preparatory research methodologies 10 ECTS
- Supervised research work 50 ECTS

Diploma: Master of Science Duration: 12 months

ACCESS TO FURTHER STUDIES

Students who have been awarded the CIHEAM Master of Science Diploma have access to **PhD programmes**. CIHEAM Bari gives support to Doctoral studies in the framework of its collaboration with Italian and foreign Universities.

CANDIDATES' PROFILE

Courses are addressed to graduate students, researchers, managers of research centres or public administrations, professionals in the following **disciplines**: Agricultural Sciences, Natural Sciences, Biology, Biotechnology, Food Sciences, Ecological/Environmental Sciences, Rural Sociology, Economy, Agribusiness. **Required level:**

- Three years (180 ECTS) or Four years (240 ECTS) of university studies;
- Four years out of five of university studies (240 ECTS), upon agreement between the sending University and CIHEAM Bari;
- Five years of university studies (300 ECTS);
- **Professionals** having a degree (3-4years) and at least **2** years of experience in a field related to the Master Programme.

ADMISSION

Selection of students is based on:

- Screening of documents sent online by candidates to support their application;
- 2. Online test to assess candidates' technical skills and abilities;
- Online English test;
- 4. Skype interview.

Submission of applications through the Online procedure Deadline: May 31, 2019

COSTS

Registration fee: 200.00€/year.

Tuition fee: 500.00€/month (travel, accommodation and insurance expenses not included).

BENEFICIARIES

Master and MSc programmes are open to candidates of any nationality.

SCHOLARSHIPS

CIHEAM BARI grants **full** or **partial scholarships** to candidates according to a ranking list. Priority is given to students coming from CIHEAM-Member countries and other Mediterranean, Balkan and Middle Eastern Countries.

LANGUAGE OF INSTRUCTION: English

For further information and application procedure: <u>www.iamb.ciheam.org</u>

FIRST-YEAR PROGRAMME

MASTER/MASTER UNIVERSITARIO DI I LIVELLO

OCTOBER 2019 - JUNE 2020

Unit I: Introductory Courses

Information and Communication Technologies; Criteria for bibliographic search and technology of search; Climate change and agriculture; Biodiversity & crops; Transboundary pests & diseases; Communication skills; High technologies for agriculture and natural resources management: Geographical Information Systems (GIS), Remote Sensing and Information Technology; English language

Unit II: Introduction to organic agriculture, agroecology and biodiversity

Principles of organic agriculture and Agroecology; Biodiversity and crops.

Unit III: Soil fertility management in organic farming

The soil: biotic and abiotic components; Cover crops, fertilizers and biomasses recycling for managing the soil fertility in organic farming; Plant nutrients management in organic farming;. Organic ruminants farming.

Unit IV: Insect, disease and weed management

Plant protection against diseases in organic production; Organic insect management; Organic weeds management; Organic beekeeping.

Unit V: Global markets and marketing for organic agro-food products

Appraisal and assessment of local food systems through participatory methods: exploring the potential of organic farming; Principles of farm economics; Marketing of agro-food products; Sustainable supply chain; Consumer and Organic Value Chain: Analysis and Research

Unit VI: Organic farming policy development and social aspects

Support policies for organic agro-food systems; National Action Plan for organic agriculture

Unit VII: Organic standards and legislation

Organic regulation in the EU and Mediterranean countries; Accreditation, certification and inspection in organic system Unit VIII: Quality, safety and post-harvest handling of organic crops

Organic food quality and safety; Food Hygiene Regulations: rules and new requirements; Food quality and safety certification schemes; Sustainable food systems

Unit IX: Organic Mediterranean commodities production

Organic olive growing; Organic horticulture growing; Organic grapevine growing.

Unit X: Concepts in sustainable development

The role of the technical advisor in designing and managing a sustainable organic farm; Regulations and procedures for the authorization to the use of organic pesticides and fertilizers; Organic Production and Sustainable Development: Frameworks and Strategies; Economic Feasibility of Small Scale Organic Production and Risk Management Strategies

Unit XI: Project

The project is on "Action learning for preparing operators of Sustainable Agriculture" It focuses on the main following activities: Sustainable Agriculture Project (SAP); classroom activities; practical days; workshops

SECOND-YEAR PROGRAMME MASTER OF SCIENCE NOVEMBER 2019 - OCTOBER 2020

Preparatory research methodologies:

Scientific English and writing. Bibliographic research and thesis writing. Research methodology in organic agriculture. Advanced statistics.

Supervised research work: Thesis and Defence

Topics generally available for Master of Science theses are:

Management of cropping systems and soil fertility, quality of agricultural products and agricultural by-product recovery

Biological control and natural biomolecules

Sustainability of agricultural and natural systems

Economic and market research

Socio-economic impacts and impacts of support policies