



## Master of Science Programme In “Mediterranean Organic Agriculture”

Academic Year 2017 - 2018

### 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 1<sup>st</sup> year is based on the completion of a series of specific one-week courses and the preparation of an individual project, whereas the 2<sup>nd</sup> 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.

A one-week Diploming Course is another opportunity offered to students: **From a business idea to its project design: the enterprise culture in the innovation process management.** By attending this module students will receive knowledge and basic skills to create, develop and communicate an innovative entrepreneurial idea, through a new and attractive method.

In 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: 70 ECTS**

- ❖ Eleven Teaching Units **63 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.

### ADMISSION

Selection of students is based on the evaluation of application documents

**Required level:** At least 4 years of undergraduate studies in the fields of Agricultural Sciences or related courses, or an academic level that qualifies applicants to undertake postgraduate level studies in their home country or a minimum of 240 ECTS or its equivalent in the home country

**Submission of applications to:** [didattica@iamb.it](mailto:didattica@iamb.it)

**Deadline:** May 31, 2017

**Registration fees:** 230.00€/year

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

### BENEFICIARIES

MSc programmes are open to candidates of any nationality. In particular, courses are addressed to: graduate students, researchers, managers of research centres or public administrations, professionals in agriculture-related fields.

### 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 form: [www.iamb.ciheam.org](http://www.iamb.ciheam.org)



## First-year Programme Master/Master Universitario di I livello October 2017 - June 2018

### **Unit I: Introductory Courses**

Information and Communication Technologies; Criteria for bibliographic search and technology of search; Project and statistics; Scientific English; Principles of organic agriculture and Agroecology; Biodiversity and crops.

### **Unit II: Organic livestock husbandry farming**

Organic poultry farming; Organic ruminants farming.

### **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; Impact of fertilization, soil tillage and crop rotation on soil properties and crop growth.

### **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**

Marketing of agro-food products; Global markets and the socio-economic impacts of organics; Consumer behaviour for organic foods. Trends in Mediterranean countries and Literature overview; Sustainable supply chain.

### **Unit VI: Organic farming economics, policy development and social aspects**

Principles of farm economics; Support policies for organic agro-food systems; National Action Plan and support policies for organic agriculture in the Mediterranean countries; Country case studies; Socio-economic Impact of Organic Farming in Developing Countries.

### **Unit VII: Organic standards and legislation**

Organic Production and Sustainable Development: Frameworks and Strategies; Organic Oversight Systems: Introduction to Certification, Accreditation and Recognition; Organic regulation in the EU and Mediterranean countries; Regulations and procedures for the authorization to the use of organic pesticides and fertilizers; Organic textiles; Organic aquaculture.

### **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; Traceability and Quality Management System in food supply chain; Post-harvest techniques.

### **Unit IX: Organic Mediterranean commodities production**

Organic olive growing; Organic vegetable growing; Organic fruit growing; Organic grapevine growing.

### **Unit X: Impact assessment of organic agriculture**

Assessment of the Impact of Organic Agriculture on the Economies of Developing Countries (economic, environmental and social); Life cycle assessment: a comprehensive methodology for environmental impact assessment.

### **Unit XI: Project**

Supervised group project on different topics of organic management introducing the approach to research in organic farming. Field trials are designed to compare organic crop management systems including: organic fertilization, crop association and intercropping, mulching, weed management, water management, etc.

## Second-year Programme Master of Science

### **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.