MASTER & MASTER OF SCIENCE PROGRAMMES IN "MEDITERRANEAN ORGANIC AGRICULTURE" ACADEMIC YEAR 2022 - 2023

DESCRIPTION

The two-year Master of Science Programme offers unique opportunities for motivated students to become the next generation of professionals and researchers in organic farming and food systems able to support further development of the sector in the Euro-Mediterranean countries and worldwide. The programme considers organic food production as a system approach from primary production to consumption with a view to achieve the objective of the farm to fork strategy and transition to fair, healthy and environmentally-friendly food systems. It provides the knowledge, skills, and mindset needed to promote the sector growth and the critical skills and perspectives for doing it through a combination of multi-disciplinary approaches to respond to global challenges.

At the end of the course, students will possess the abilities to:

- Understand the importance of a more sustainable organic food production and advocate for ecologically sound solutions;
- Know legal requirements for organic food production, and how to drive farms/operators towards transition/conversion processes;
- Identify the best management practices based on multi-dimensional assessment framework;
- Apply value chain approach;
- Facilitate multi-actors' engagement processes.

The programme involves CIHEAM Bari scientific and expert staff and visiting academics and practioners who have made exceptional contributions to the sector. Students will also undertake several practical activities and assignments to develop their skills and competencies in the organic sector. First year of MSc programme is composed of seven thematic units and an applied project. During the second year, students will carry out research projects under the supervision of topic experts.

ORGANIZATION

First Year: 60 ECTS
Diploma: Master of CIHEAM Bari
Duration: 9 months (Oct 2022 – Jun 2023)

Second Year: 60 ECTS
Diploma: Master of Science
Duration: 12 months (Nov 2023 – Oct 2024)

CANDIDATES' PROFILE

The course is addressed to new graduate students and young professionals with a university background related to agronomic, horticultural, agricultural marketing and socio-economic issues.

Requirements:
• Holding a University degree awarding at least 180 ECTS;
• Having completed four out of five years of University studies, upon agreement between the sending University and CIHEAM Bari (the year attended at CIHEAM Bari is recognized as final year in order to graduate at the University of origin);
• Good knowledge of spoken and written English;
• Personal access to computer facilities.

ADMISSION

Selection of students is based on:
1. Screening of documents sent online by candidates to support their application;
2. Online interview.

APPLICATIONS through the online procedure (http://online-application.iamb.ciheam.org/users/sign_in)

Deadline: 31 May 2022

COSTS

Registration fee: 200.00€/year
Tuition fee: 500.00€/month (travel, accommodation and insurance expenses not included)

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, Middle Eastern and African Countries

LANGUAGE OF INSTRUCTION: English

For further information and application procedure: www.iamb.ciheam.org

FIRST YEAR PROGRAMME

Unit I - Sustainability in agriculture and food systems (delivered in distance learning): the unit frames the concepts of sustainability applied to agriculture and food sectors. It provides elements for understanding the main agricultural challenges to design solutions and actions towards sustainable and resilient agri-food systems. It presents policies, strategies, and initiatives to foster the transition towards sustainability in agriculture and food systems in the Mediterranean area, the European Union and worldwide. The multi-dimensions nature of sustainability challenges will be analyzed, getting students to reflect on processes for sustainability transitions in agri-food systems.

Unit II - Agroecology and climate change: the unit focusses on the ecological processes at the foundation of agroecosystem functioning as well as social processes of communities and smallholders to promote agroecological transition to sustainable food systems in the context of the current climate changes and global challenges. It motivates students to comprehend the complexity of the factors and processes that influence the sustainability of agroecosystems. It describes the range of ecosystem services from an agroecosystem perspective, framing them in the farming activities and introducing practices with a special focus on biodiversity management.

Unit III - Organic principles, concepts and frameworks: unit provides an overview of the philosophy, principles, history and development of sector. It introduces the organic agriculture with relation to its movements under regulatory and policy frameworks in particular the EU legislation in the sector. It explains how farms should go through conversion processes. The unit explains also the organic certification schemes and inspection under specific regulations and standards. Moreover, it presents the most important policies and programmes that advocate and support organic sector development in Euro-Mediterranean countries.

Unit IV - Soil management and fertility: unit provides brief introduction to soil system and covers the fundamental principles of soil management in organic farming and fertility conservation and improvement. Organic farming practices will be described in detail by considering farm as a potential self-sustaining biological system, which adopts environmentally sustainable practices and maintains or improves soil health and ensure crop quality and productivity. This course is designed for offering hand-on experiences and student will learn about soil nutrients dynamic and supply, characteristics of organic inputs and how to reach fertilization plans.

Unit V - Pests and diseases control: unit covers the principles for pest and disease management in organic farming. System approach strategies will include crop choice and rotations schemes, preventive measures, biological control strategies, authorized Plant Protection Products, alternative inputs, biological control and novel techniques/technologies. The main pests and diseases of the Mediterranean crops (olives, vine and citrus) and relevant control strategies will be illustrated.

Unit VI – Sustainable farm management: unit introduces sustainable farm management as a decision-making process concerning the allocation of scarce resources in agricultural production for the improvement of the environmental, economic, social, cultural sustainability. Methods for the performance analysis and for the assessment of the farm sustainability are described as tools to drive farmers towards competitiveness and sustainability in the agri-food system challenges. Farm economics principles, with an agri-environmental perspective, particularly regarding farm management, accounting and budgeting, economic analysis, business planning will be taught. Students will analyze organic and conventional farms, assessing sustainability levels.

Unit VII – Organic food value/supply chains and marketing: unit provides knowledge and methods to enter the organic market with a multi-stakeholder and supply/value chain perspective. It provides a framework for concepts, definition and evaluation of organic food quality and safety. Students will learn to apply value chain development concepts by analyzing its components and phases, actors and services. Organic food consumption trends and drivers will be analyzed and methodology to the study consumer behavior will be introduced. A range of approaches in developing more inclusive, equitable, transparent and sustainable organic value chains will be experienced. Moreover, innovative solutions able to add value along the value chain will be exploited.

Applied Project:
Students will have the opportunity to participate in experimental activities addressing the main challenges of the organic sector. The activities will be designed to develop the students' capacity to observe, analyze and propose solutions to complex problems by applying combined approaches gained during the academic year.

SECOND-YEAR PROGRAMME

During the second year, students will carry out research projects under the supervision of topic experts. Students will be able to choose projects which link to their interests for future career development.

Topics generally available for Master of Science theses are:

- Cropping systems, soil fertility, products quality and by-product managements
- Biological control and natural compounds for pests' management
- Farm management and food system sustainability assessments
- Economic and marketing research
- Socio-economic and support policies impacts
- Organic food and added-value products development