

Course Detail

Master of Science in Organic Agriculture Management

Course Title:	Master of Science in Organic Agriculture Management (International Program)
Master Degree:	Master of Science (Organic Agriculture Management)
Academic Institution:	International College, Maejo University
Duration:	2 years (June 2022 - 2024)

Background and Rational:

Over the years, the university has conducted research and development of organic agriculture in a full range. We transfer knowledge modern technology to the use of the community in the form of academic services to society especially the issue of the impact of the monoculture production system, which is the mainstream agricultural system with continuous use of chemicals which is the cause of the destruction of the environment and life in this world, destroy the health of farmers manufacturers and consumers and reduce food security seeds and crops that grow from the land and water sources of the community without knowing the value.

Under the Educational Development Plan of Maejo University, Phase 12 (2017-2021), the main mission of higher education institutions and the objectives of the university establishment, at present, the university has established an important strategy for becoming a leading university with agricultural excellence at international level. We focus on producing graduates to be knowledgeable, international ability and develop research and innovation by using agriculture as a base in order to be accepted at the national and international level. In addition, the importance of being a center for learning and transferring arts and culture local knowledge.

Maejo University by the Maejo International College, therefore designed the Master of Science Program in Organic Agriculture Management as an international program to produce and develop manpower in organic agriculture management. This program is adhering to the philosophy of sufficiency economy as the basis create innovation according to the sustainable development guidelines of the country and the world society graduates will be ready and able to pursue the following occupations;

- Executives, social entrepreneurs and organic agriculture
- Academics, researchers and organic agricultural workers in government and private agencies
- Executives, leaders, relevant developers, the environment, public health and agriculture

University readiness in curriculum preparation

1. The university is well equipped with academic personnel who are professors and researchers with knowledge and expertise and have direct experience both from teaching, research and academic services
2. The university has a network of cooperation with external agencies. We working with the farmer group of producer, processor and distributor that can be a base for learning exchange and can practice joint research for national development
3. International Organic Agriculture Management Program is designed to be a curriculum that answers social needs consistent with the philosophy, objectives and vision of Maejo University to be a leading university with international agricultural excellence. In addition, it also focuses on creating new research and innovation and also focus on developing leaders and organic agriculture entrepreneurs in order to make changes.

Objectives:

This program intends to produce post-graduates who are qualified as follows:

- 1) Ability to apply knowledge and skills in organic agriculture and integrated agricultural management to sustainability at all levels, through research process.
- 2) Leadership skills, know how to produce and sell with morals and ethics, as well as responsible to community, society and environment.
- 3) English Skills for presenting and publishing to recognized international journals.
- 4) Ability to use IT for communication and development of organic agriculture effectively.

Course Synopsis and Methodology:

Study Plan

The program provide 3 plans of study, with the total credits not less than 36 credits.

- **Plan A Type A1:** research oriented plan; designed for those researchers and other who have research experience in agriculture & related field > 1 year.
- **Plan A Type A2 :** research oriented plan; designed for B.S. graduate without research experience

Plan B: designed for B.S. graduate without research experience

Courses	Plan A1 (Research)	Plan A2 (Course work + thesis)	Plan B (Course work + IS)
Non-Credit Courses	(7)	(7)	(7)
Course work	-	24	30
– Core	-	16	16
– Elective	-	8	14

Thesis	36	12	–
Independent Study (IS)	-	-	6
Total Credits	36	36	36
Comprehensive Exam	-	-	x

Course Content/ Study Topic:

(1) Non-Credit Courses	7 Credits
OM 501 Research Methodology for Interdisciplinary Organic Agriculture Management	3 (2-3-5)
OM 591 Seminar 1	1 (0-2-1)
OM 592 Seminar 2	1 (0-2-1)
OM 593 Seminar 3	1 (0-2-1)
OM 594 Seminar 4	1 (0-2-1)
(2) Major Core Courses	9 Credits
OM 502 Organic Standard System	3 (2-3-5)
OM 503 Organic Agribusiness Innovation and Technology Management	3 (2-3-5)
OM 504 Processing Innovation and Branding of Organic Products	3 (2-3-5)
(3) Major Elective Courses *	15 Credits
OM 511 Cannabis Science	3 (2-2-5)
OM 512 Beekeeping in Organic Farming	3 (2-2-5)
OM 513 Organic Livestock Production and Organic Aquaculture Farming	3 (2-2-5)
OM 514 Organic Seed Science and Technology	3 (2-2-5)
SM 515 Advanced Technology and SMART Farm in Modern Agriculture	3 (2-2-5)
OM 521 Sustainable Organic Farming Management	3 (2-2-5)
OM 522 Accounting and Financial Management for Organic Agribusiness	3 (2-2-5)
OM 523 Strategies for Organic Agribusiness Development	3 (2-2-5)
OM 524 Entrepreneurship in Organic Agriculture	3 (2-2-5)
OM 525 Business Plan for Entrepreneur in Organic Agribusiness	3 (2-2-5)
OM 526 Supply Chain and Logistics Management for Entrepreneurship in Organic Agribusiness	3 (2-2-5)
OM 526 Supply Chain and Logistics Management for Entrepreneurship in Organic Agribusiness	3 (2-2-5)
** Total 15 Credits for Plan A2, Total 21 Credits for Plan B	
(4) Thesis	
OM 691 Thesis 1 (Plan A1, Plan A2)	6 (0-18-0)
OM 692 Thesis 2 (Plan A1, Plan A2)	6 (0-18-0)
OM 693 Thesis 3 (Plan A1)	12 (0-36-0)
OM 694 Thesis 4 (Plan A1)	12 (0-36-0)

(5) Independent Study

6 Credits

OM 690 Independent Study

Course Description

OM 501 Research Methodology for Interdisciplinary Organic Agriculture Management 3 (2-3-5)

The concepts of interdisciplinary organic agriculture management research. Experimental designs and steps in interdisciplinary organic agriculture management research, data processing, analysis and interpretation of research results, writing and presenting a research report.

OM 591 Seminar 1 1 (0-2-1)

Presentation and discussion of topics of interest in the general area of organic agriculture management for master degree students

OM 592 Seminar 2 1 (0-2-1)

Presentation and discussion of topics of interest in the specialized area of Organic agriculture management related to master thesis.

OM 593 Seminar 3 1 (0-2-1)

Presentation and discussion of topics of interest in the specialized area of Organic agriculture management related to master thesis.

OM 594 Seminar 4 1 (0-2-1)

Presentation and discussion of topics of interest in the specialized area of Organic agriculture management related to master thesis..

OM 502 Organic Standard System 3 (2-3-5)

Principles and practices of organic crop production, organic input Production, weed management, pest control and plant diseases, organic farm and processing unit inspector, certification and documentation in international organic standard.

OM 503 Organic Agribusiness Innovation and Technology Management 3 (2-3-5)

Concepts of management of organic agriculture innovation and technology, Use of information technology for data analysis and management in organic agribusiness, digital management for organic agribusiness.

OM 504 Processing Innovation and Branding of Organic Products 3 (2-3-5)

Principles of organic agricultural products processing, Techniques for processing organic agricultural products, phytochemical extraction and analysis of natural products, sensory and shelf life testing, quality control of organic products, introduction of new product, market testing and brand building.

- OM 511 Cannabis Science** 3 (2-2-5)
 Botany of Cannabis, culture, bioactive compound, extraction and analytical techniques for bioactive compounds, processing, marketing and the application of Cannabis in the medicine, cosmetic and pharmaceutical industries.
- OM 512 Beekeeping in Organic Farming** 3 (2-2-5)
 Biodiversity of honey bees, bee behavior, colony development, bee enemies, develop and bee propagation, breeding of bees, honey bee production technology, value added of honey bee products, organic beekeeping farming-system, utilization of bee in the pollination of organic agriculture crop, organic honey bee product management and field trip.
- OM 513 Organic Livestock Production and Organic Aquaculture Farming** 3 (2-2-5)
 Principles and animal production in organic farming systems, organic livestock farming management, organic livestock feed production, principles and practices of organic aquaculture farming, ecological system in aquaculture farm, organic aquatic animal feed and organic aquaculture farming management, processing and management of livestock and aquatic animals products in organic systems.
- OM 514 Organic Seed Science and Technology** 3 (2-2-5)
 Physiology and development of seed science production, organic seed production, storage, organic seed testing and quality control, handling, packaging, seed laws and regulations, seed processing and improvement, modern seed technology for high quality and high standard of organic seed.
- OM 515 Advanced Technology and SMART Farm in Modern Agriculture** 3 (2-2-5)
 Applications of advanced agricultural technologies, automated and precision system, application of the Geographic Information System (GIS), modern tools and machinery, application of the remote sensor for the precision farm management and development directions corresponding with global situations.
- OM 521 Sustainable Organic Farming Management** 3 (2-2-5)
 Patterns of organic farming systems, factors affecting farming system management, research and development on cropping patterns, sustainable management in production, land conservation and utilization, integrated pest management in farming systems, planning and farm budget, analysis and evaluation of organic farming systems, marketing and price of product.
- OM 522 Accounting and Financial Management for Organic Agribusiness** 3 (2-2-5)
 Roles of accounting and finance in organic agribusiness management concepts of financial management in organic agribusiness, cost analysis, financial performance analysis, risk and return in organic agribusiness, short and long term financing and budgeting, financial budgeting for organic agribusiness.

- OM 523 Strategies for Organic Agribusiness Development** 3 (2-2-5)
 Concept of strategies for organic agribusiness, related problems about organization management in organic agribusiness, direction of business management and administration, business development, production and marketing of input, agricultural outputs and products under globalization, organic agribusiness organization development
- OM 524 Entrepreneurship in Organic Agriculture** 3 (2-2-5)
 Characteristics of entrepreneurship in organic agriculture business; Inspirational encouragement; Entrepreneurial development; Laws for new business establishments; Sources of funding; Marketing research creation of business plan; Marketing plan; Production plan; Organizational and operational plan; Business plan evaluation; Guidelines for business operations.
- OM 525 Business Plan for Entrepreneur in Organic Agribusiness** 3 (2-2-5)
 Concept, significant and use of business plan, the principles of writing business plan, business background, industry competitive analysis, determination of vision, mission and goals, business strategy, operation plan, backup plan and solutions.
- OM 526 Supply Chain and Logistics Management for Entrepreneurship in Organic Agribusiness** 3 (2-2-5)
 Impacts of logistics operations to business organizations, logistics service provider, international logistics, logistics costs analysis for business decision making, measuring logistics performance, organizing for effective logistics, supply chain management..
- OM 691 Thesis 1** 6 (0-18-0)
 Review the literature related to the master thesis, conceptual framework, experimental design and thesis planning, emphasize the discussion with advisory committee to select research topic and propose proposal
- OM 692 Thesis 2** 6 (0-18-0)
 Plan A Type A1: Research conduction with creativeness, theory and analysis techniques with instruments, data collection and interpretation, discussion with advisory committee and solving research problems.
 Plan A Type A2: Research conduction with creativeness, theory and analysis techniques with instruments, data collection and interpretation, development of independent thinking and expression of opinion, integration of research knowledge for research publication, academic presentation and thesis writing in clear and concise manner; thesis preparation must be done according to Maejo University guidelines.
- OM 693 Thesis 3** 12 (0-36-0)
 Research data collection and interpretation, independent thinking and personal development, integration of research knowledge for research publication and academic presentation.
- OM 694 Thesis 4** 12 (0-36-0)
 The development of independent thinking & expression of opinion, creating and integration knowledge which reflects research gained for thesis writing in clear and concise manner; thesis preparation must be done according to Maejo University guidelines.

OM 690 Independent Study

6 (0-18-0)

Independent study at the master's level as characterized by analysis and study of data related to major courses and writing as report, under the supervision and recommendation of the student advisor..

Applicant Qualifications:

Qualifications	Study Program	
	Plan A , Type A1 & A2	Plan B
Education level	Bachelor degree or equivalent in the field of Science or any other related fields	Bachelor degree or equivalent in the field of Science or any other related fields
GPA	> 3.25 for Type A1 or > 2.75 with research article or publication in journals. > 2.5 for Type A2	> 2.5
Work experience	Research experience or work for agriculture, community development, or related fields at least one year.	At least 3 years of experience in agriculture , community development, or related fields
English Language Certification	TOEFL (Paper based) = 500 TOEFL (Internet based) = 65 TOEFL (Computer-based) = 173 IELTS = 6.0	TOEFL (Paper based) = 450 TOEFL (Internet based) = 55 OEFL (Computer-based) = 160 IELTS = 4.5 (Or pass the English Proficiency Test which conducted by Mae Jo University within the first academic year of the study duration.)
Applications in addition to above requirements are in accordance with the approval by program committee.		

Document Required:

- 1) Application Form sealed with photo & curriculum vitae
- 2) Transcripts of studies in English.
- 3) English language certificate (e.g. TOEFL, IELTS), if available)
- 4) References Recommendation Letters
- 5) A brief proposal of research project (Plan A) and independent study (Plan B),
With statement of the problems, objectives and expectations

Contact:**Lecturers Responsible for the Program**

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***The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/territories.