

Master of Science Program in Agricultural Science

Research Focus

- Advanced Plant Breeding
- Soil Resources and Agricultural Environment Management
- Tropical Animal Production
- Energy Crops and Industrial Crops
- Postharvest Physiology and Technology
- Plant Disease Management
- Insect Pest Management
- Technology for Biofertilizer Production

Structure of the Program

1. Credit Requirements *

Requirements	Option 1.1	Option 1.2
Coursework	-	24
- Core Courses	-	-
- Electives	-	24
Required Non-credit Courses	6	6
Thesis	36	12
Total	36	36

* Minimum credits required

2. Electives

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
General Subject				
Quality Assurance Systems for Agricultural Products	-	-	107500	3
Ecological Agriculture and Natural Resources	-	-	107501	3
Advanced Technology in Modern Agriculture	-	-	107502	3
Agro-Ecology	-	-	107503	3
Experimental Designs in Agriculture	-	-	107504	3
Plant Science				
Crop Production under Controlled Environment	-	-	107510	3
Selected Topics in Plant Science	-	-	107511	3
Advanced Crop Physiology	-	-	107512	3
Advanced Plant Breeding	-	-	107513	3
Advanced Physiology of Fruit Crops	-	-	107514	3
Plant Molecular Biology	-	-	107515	3
Physiology of Flowering	-	-	107516	3
Stress Physiology of Crops	-	-	107517	3
Entomology				
Insect Physiology and Biochemistry	-	-	107520	3
Biological Control of Insect Pests and Weeds	-	-	107521	3
Insect Molecular Genetics	-	-	107522	3
Insecticides	-	-	107523	3
Advanced Insect Ecology	-	-	107524	3
Insect Morphology and Classification	-	-	107525	3
Environmental Entomology	-	-	107526	3
Insect Behavior and Evolution	-	-	107527	3
Integrated Pest Management	-	-	107528	3
Insect Pollinator Management	-	-	107529	3
Soil Resources and Agricultural Environment Management				
Advanced Soil, Plant and Fertilizer Analysis	-	-	107540	3
Advanced Soil Fertility	-	-	107541	3

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
Soil and Water Pollution	-	-	107542	3
Soil Microbial Ecology	-	-	107543	3
Advanced Fertilizer Technology	-	-	107544	3
Soil and Land Resource Assessment	-	-	107545	3
Soil, Water and Plant Relationships	-	-	107546	3
Remote Sensing for Agriculture	-	-	107547	3
Geographic Information System for Agriculture	-	-	107548	3
Integrated Management of Soil Resources and Agricultural Environment	-	-	107549	3
Agricultural Development				
Strategic Agriculture Management on Production and Marketing	-	-	107550	3
Selected Topics in Agricultural Development	-	-	107551	3
Agricultural Organization Management and Policy Planning	-	-	107552	3
Rapid Rural Appraisal and Rural Development	-	-	107553	3
Agricultural Information System	-	-	107554	3
Socio-Economic Aspects in Agriculture	-	-	107555	3
Development of Agriculture and Agricultural Society	-	-	107556	3
Tropical Animal Production				
Biotechnology in Animal Production	-	-	107560	3
Selected Topics in Tropical Animal Production	-	-	107561	3
Tropical Animal Feed Resources	-	-	107562	3
Techniques in Animal Nutrition Research	-	-	107563	3
Advanced Meat Science and Technology	-	-	107564	3
Advanced Monogastric Animal Nutrition	-	-	107565	3
Advanced Ruminant Nutrition	-	-	107566	3
Advanced Feed Technology	-	-	107567	3
Domestic Animal Metabolism	-	-	107568	3
Environmental and Animal Waste Management	-	-	107569	3
Field of Study: Energy Crops and Industrial Crops				
Biomass and World Environment	-	-	107570	3

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
Principles of Energy Crop and Industrial Crop Production	-	-	107571	3
Energy Conversion from Energy Crops and Industrial Crops	-	-	107572	3
Postharvest Handling of Energy Crops and Industrial Crops	-	-	107573	3
Industrialization and Marketing System of Energy Crops	-	-	107574	3
Field of Study: Postharvest Technology				
Selected Topics in Postharvest Technology	-	-	107580	3
Advanced Postharvest Physiology of Agricultural Produces	-	-	107581	3
Postharvest Handling System of Cereals and Grains	-	-	107582	3
Postharvest Insect Pest of Agricultural Products	-	-	107583	3
Postharvest Pathology of Agricultural Products	-	-	107584	3
Research Techniques in Postharvest Technology	-	-	107585	3
Packaging Technology	-	-	107586	3
Minimal Processing of Horticultural Produce	-	-	107587	3
Total	-	-	≥8	≥24

3. Required Non-credit Courses

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
Seminar 1	107507	1	107507	1
Seminar 2	107508	1	107508	1
Seminar 3	107509	1	107509	1
Research Methodology in Science and Technology	107591	3	107591	3
Total	4	6	4	6

4. Thesis Credit Requirements

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
Thesis 1, Option 1.1	107592	9	-	-
Thesis 2, Option 1.1	107593	9	-	-
Thesis 3, Option 1.1	107594	9	-	-
Thesis 4, Option 1.1	107595	9	-	-
Thesis 1, Option 1.2	-	-	107596	3
Thesis 2, Option 1.2	-	-	107597	3
Thesis 3, Option 1.2	-	-	107599	6
Total	4	36	3	12