

Crop Science

Programmes

Master of Crop Science
 Master of Floriculture & Landscape Architecture
 Master of Environmental Forestry
 Master of Tropical Agriculture
 Master of Plantation Crop Management
 Master of Horticulture
 M.Sc. in Crop Science
 M.Sc. in Floriculture & Landscape Architecture
 M.Sc. in Environmental Forestry
 M.Sc. in Tropical Agriculture
 M.Sc. in Plantation Crop Management
 M.Sc. in Horticulture
 Master of Philosophy (M.Phil.)
 Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study (BS) in Crop Science was established with the formation of the PGIA in 1975. The BS maintained a steady intake of students for the degrees of M.Sc., M.Phil. and Ph.D. throughout the last few decades. The research work carried out in fulfilment of its research degrees has made a significant contribution towards improving crop productivity in the country. At present the Board offers courses in a diverse range of areas within the purview of Crop Science.

The degree programme in Crop Science offered is focused on the integrated crop production technologies with a view to upgrade the scientific and practical knowledge base of agricultural scientists and thus enhance the productivity of the cultivated lands of Sri Lanka. Development of forestry and agroforestry related solutions are powerful ways to address environmental problems in Sri Lanka and it requires training personnel on broad subject areas of forestry, agroforestry and environment. Based on the current needs and demands in the country the BS designed a Master degree programme in Environmental Forestry.

Sri Lanka has ideal climatic zones for production of flowers and foliage plants. The Floriculture industry in Sri Lanka has shown a steady growth during the recent past. The landscape and floriculture industry go hand in hand as both need plants. With the wide range of plant species available in the country, both industries will provide opportunities to earn foreign exchange and beautify the country. The demand for landscaping is now significant and increasing. As the Institute has always focused on areas of national importance, the BS introduced the M.Sc. in Floriculture and Landscape Architecture to cater to this demand. The Master degree programme in Tropical Agriculture provides multidisciplinary, production-oriented training in tropical agriculture to participants to be professionally active in the agricultural sector in the tropics. The BS has also proposed new degree programmes to cater the national demand.

Recent research

- Identification of habitats and reproduction of *Cyathea sinuata*, *Cyathea hookeri* and their possible hybrid and their characterization in Kanneliya and Sinharaja MAB reserves for their conservation (introduced two new endemic plant species to the science in 2010)
- Development of cost effective micropropagation technique for rapid multiplication of hybrid Tea (Introduced low cost micropropagation technique for rapid multiplication of tea hybrids)
- Effect of Rice straw mulching on agronomic traits and weed control of direct seeded lowland rice (*Oryza sativa* L) (introduced integrated nutrient and weed management system for low land rice in Anuradhapura district)
- Identification of candidate genes for salt tolerance in the Sri Lankan rice variety AT 354 based on gene expression profiles
- Improvement of plant nutrient supply of greenhouse Tomato for enhanced growth and yield under dry climates
- Induction of poinsettia (*Euphorbia pulcherrima* Willd. ex Klotzsch) blooming during off season to use as marketable pot plant for indoor decorations
- Screening of rice varieties for salt tolerance: influence of whole and subsoil salinity on crop performances and agronomic mitigation measures
- Variability of the antioxidant activity of fruits from Dry Zone home gardens
- Variation of growth, physiological and biochemical parameters of two contrasting coconut genotypes in Different agro-ecological regions and land suitability classes of Sri Lanka and their relationship to drought tolerance



Research station in Dodangolla

This is one of the research stations of the University of Peradeniya, utilized by many PGIA students for their research.

Master of in Crop Science

Overview

Producing sufficient food to feed an increasing human population using a decreasing and a more expensive resource base in terms of land, nutrients and water in the face of environmental threats such as climate change is the greatest challenge faced by humankind

in the 21st Century. Producing trained personnel in Crop Science, the science and practice of growing agricultural crops to maximize food production, is essential to meet the challenge of ensuring food security at both national and global levels. Accordingly, the Master degree programme in Crop Science provides a broad and comprehensive coverage of all aspects of Crop Science.

The degree offers an impressive array of courses on the principles and practices of modern crop production technologies aimed towards increasing the productivity and profitability of a wide range of agricultural and horticultural crops. Due to its broad-based course package, Master of (Crop Science) graduates are able to enter a diverse range of career paths such as research and development, farm and enterprise management, policy formulation, rural development and self-employment through entrepreneurship. Past graduates have built successful careers both within and outside Sri Lanka in government institutions including universities, private sector companies and non-governmental organizations.

Key features

The Master degree in Crop Science is open to a wide range of graduates with Bachelor's qualification in Agriculture, Biological Sciences and Applied Sciences. Course package of the degree programme includes courses in the following broad disciplines of Crop Science: Agronomy of field and plantation crops,

Horticulture, Crop Physiology, Plant-Water Relationships, Management of Plant Nutrition, Seed Physiology, Weed Biology and Management, Commercial Nursery Management and Fruit and Vegetable Crop Production.

Courses on advanced crop production technologies such as Protected Culture, Tissue Culture and Postharvest Physiology of Horticultural Produce and a course on Climate Change and its impacts on crop production are particular features of the course package. All courses contain up-to-date curricula and are taught by a

faculty of highly-qualified Professors and Senior Lecturers from the University of Peradeniya, qualified and experienced officers from the National Agricultural Research System and experienced managers from the private sector.

As part of the broad-based nature of the degree programme, a considerable range of courses related to Forestry, Agroforestry and Natural Resource Management are also included in the course package as elective courses so that interested candidates can obtain a broader knowledge in these disciplines.

No. of Credits: 30

Minimum Programme Duration: 3 semesters

Entry Requirements: Applicants should possess a Bachelor's degree in Agriculture, Plant Sciences or equivalent qualifications acceptable to the Senate of the University of Peradeniya. Students holding non-agricultural degrees are required to follow prerequisite courses (CS 5101 and one of the courses from CS 5129, CS 5130 or CS 5131) in consultation with the programme coordinator.

Code	Title	Credits	Option
First Semester			
CS 5101*	Principles of Crop Production	3	Prerequisite
CS 5102	Plant Water Relationships I	2	Compulsory
CS 5103	Weed Biology	2	Compulsory
CS 5104	Advanced Horticulture	2	Compulsory
CS 5105	Crop Physiology	3	Compulsory
CS 5131**	Tropical Field Crop Production	3	Compulsory
CS 5106	Seed Physiology and Technology	2	Elective
CS 5107	Protected Culture	2	Elective
CS 5108	Fruit Crop Management	2	Elective
CS 5109	Olericulture (Vegetable Crop Culture)	2	Elective
CS 5110	Forest Ecology	2	Elective
CS 5111	Agroforestry	2	Elective
CS 5112	Plantation Forestry and Environment	2	Elective
CS 5120	Commercial Nursery Management	2	Elective
SS 5151	Management of Soil Organic Matter	2	Elective
ST 5155	Design and Analysis of Experiments	2	Elective
CS 5145	Turf grass Management	1	Elective
Second Semester			
CS 5202	Weed Control	2	Compulsory
CS 5203	Climate Change and Crop Production	3	Compulsory
CS 5204	Crop Management Techniques	3	Compulsory
CS 5298	Directed Study	5	Compulsory
CS 5201	Crop Ecology	2	Elective

Note: Course list continued on next page

CS 5206	Postharvest Physiology and Management of Horticultural Produce	2	Elective
CS 5207	Physiology of Cereal Production	2	Elective
CS 5208	Organic Crop Production	2	Elective
CS 5209	Plant Water Relationships II	2	Elective
CS 5210	Plant Functional Traits	1	Elective
CS 5211	Tree Crop Physiology	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective
CS 5231	Crop Simulation Modelling	2	Elective
ST 5253	Crop and Animal Experimentation	1	Elective
SS 5201	Soil Fertility and Fertilizers	3	Elective

* Prerequisite for non-agricultural graduates

** Compulsory for non agriculture graduates

Master of Floriculture and Landscape Architecture

Overview

The Master of Floriculture and Landscape Architecture is designed for students seeking research and professional careers in design, implementation and management of landscaping projects for commercial enterprises and home gardens. The course is structured to support students to develop technical, design, planning, scientific and management skills in floriculture and landscape architecture to take part in the industry that will continue to expand into the future.

Key features

The programme offers courses in the topics of commercial floriculture, nursery management, landscape horticulture, landscape architecture, landscape designs, indoor gardening for interior decoration, plant breeding and biotechnology, plant pathology and additional subjects providing up to date knowledge of floriculture, landscape architecture and interdisciplinary aspects of natural sciences.

The programme consists of lectures, field visits, laboratory and farm practices. Compulsory subjects

No. of Credits: 30

Minimum Programme Duration: 3 semesters

Entry Requirements: Applicants should possess a Bachelor's degree in Agriculture, Plant Sciences or equivalent qualifications acceptable to the Senate of the University of Peradeniya. Students holding non-agricultural degrees are required to follow prerequisite courses in consultation with the programme coordinator.

necessary know-how required for the floriculture industry and designing of landscaping projects. The programme also offers flexibility in selecting subjects according to personal interests through elective courses.

After graduation students will be able to organize and lead the floriculture and landscape industry to carry out the tasks of managers, designers and take part in research and education.

Code	Title	Credits	Option
First Semester			
CS 5107	Protected Culture	2	Compulsory
CS 5119	Landscape Horticulture	3	Compulsory
CS 5120	Commercial Nursery Management	2	Compulsory
CS 5121	Landscape Architecture	2	Compulsory
CS 5104	Advanced Horticulture	2	Elective
CS 5106	Seed Physiology and Technology	2	Elective
CS 5122	Plant Growth Regulators	2	Elective
CS 5123	Plant Tissue Culture – Micropropagation	2	Elective
EC 5104	Agricultural Marketing I	2	Elective
PP 5102	Plant Pathology	2	Elective
Second Semester			
CS 5206	Post-harvest Physiology and Management of Horticultural Crops	2	Compulsory
CS 5222	Commercial Floriculture	3	Compulsory
CS 5223	Indoor Gardening for Interior Decoration	2	Compulsory
CS 5224	Landscape Designs	3	Compulsory

Note: Course list continued on next page

CS 5298	Directed Study and Seminar	5	Compulsory
CS 5202	Weed Control	2	Elective
CS 5216	Urban Forestry and Arboriculture	2	Elective
CS 5225	Advanced Plant Tissue Culture	2	Elective
AB 5203	Plant Breeding Techniques	2	Elective
SS 5201	Soil Fertility and Fertilizers	3	Elective
PP 5254	Disease Management in Floricultural Crops	2	Elective



Tissue Culture Facilities



Master of Plantation Crop Management

Overview

The plantation sector can be considered a principal component of the Sri Lankan economy in terms of export earnings, livelihoods of people and product consumption. The sector has transformed

its image into a 'technology-based industry', dealing with competitive international market trends. There are several newly emerging challenges, opportunities and critical issues in these sectors, which have opened up new dimensions. These need to be taken into account in the production and processing of plantation crops and dealt with in a timely and professional manner.

The Master of Plantation Crop Management offers a wide array of courses tailor-made for the needs of the industry in a professional manner. Due to its broad-coverage of the courses, the Master Plantation Crop Management will produce competent postgraduates who are able to face the challenges and address a diverse range of issues related to plantation crops while exploring the competitive global market opportunities more efficiently. The structured program provided by the Master of Plantation Crop Management also provides an opportunity to upgrade and update the knowledge of those who are already employed in the plantation sector with relevant and current information.

Key features

The courses in the Master of Plantation Crop Production will provide current and advanced knowledge, skills and develop appropriate attitudes in all relevant subject areas of plantation crops in Sri Lanka as follows: Production, postharvest handling; processing and product technologies; management; marketing; certification; value chain analysis; value addition and product diversification; policies and related legislations; organizational, human management.

No. of Credits: 30

Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants should possess a B.Sc. degree in Agriculture, Science/Natural Science, Forestry, Management or an equivalent qualifications acceptable to the Senate of the University of Peradeniya.

The courses are taught by qualified and highly trained staff members including Senior Professors, Professors and Senior Lecturers of the Faculty of Agriculture, University of Peradeniya, and members of the National Research Institutes, Forest Department, and officials from the private sector.

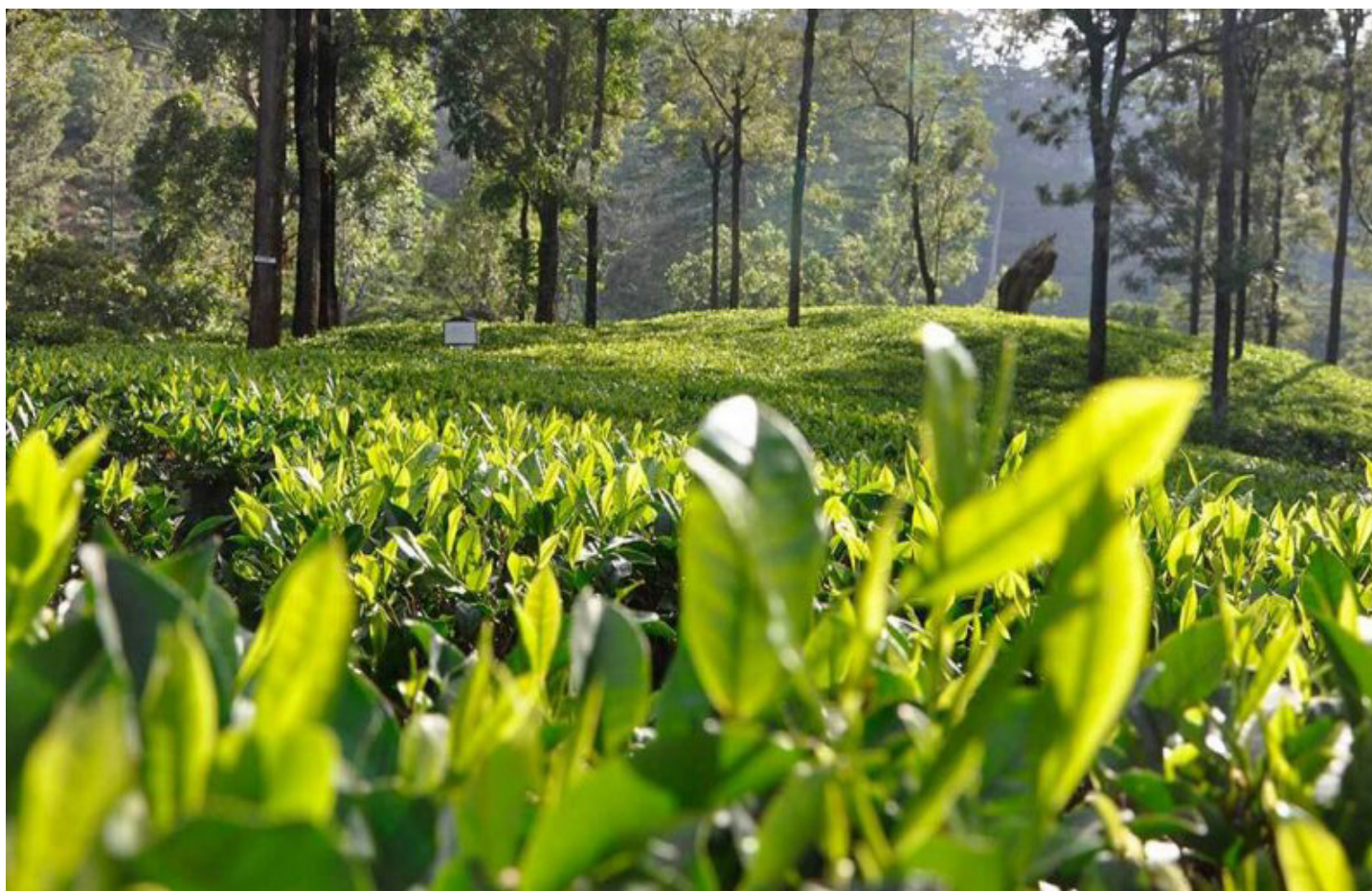
The courses will be taught by using interactive learning methods, by the trained staff members of the Faculty of Agriculture, to make the learning experience effective and efficient. The Master programme is further strengthened by the Industrial Training component offered in the 3rd semester, which is of candidates choice.

Code	Title	Credits	Option
First Semester			
CS 5137	Agronomy of Plantation Crop Practices	2	Compulsory
CS 5112	Plantation Forestry and Environment	2	Compulsory
CS 5130*	Cultivation and Processing of Plantation Crops	3	Compulsory
CS 5138	Plantation Crop and Forestry Sector Policy and Legislation	1	Compulsory
EX 5115	Human Resource Management in the Plantation Sector	1	Compulsory
AB 5108	Principles of Plant Breeding	2	Compulsory
CS 5114	Biodiversity	2	Elective
CS 5110	Forest Ecology	2	Elective
CS 5111	Agroforestry	2	Elective
Second Semester			
CS 5238	Yield Physiology of Plantation Crops	2	Compulsory
PP 5260	Advances in Plant Protection Methods for Plantation Crops and Forest Species	1	Compulsory
CS 5239	Processing and Value Addition of Plantation Crop Products	2	Compulsory
SS 5209	Land Use Planning	2	Compulsory
CS 5240	Plantation Crop Improvement	2	Compulsory
CS 5298	Directed Study	5	Compulsory
EC 5237	Agricultural Value Chain Management	1	Elective
CS 5208	Organic Crop Production	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective
ST 5253	Crop and Animal Experimentation	3	Elective
CS 5215	Ecological Interactions of Trees and Crops	2	Elective
CS 5216	Urban Forestry and Arboriculture	2	Elective
SS 5204	Management of Tropical Uplands	1	Elective

Note: Course list continued on next page

Second Year First Semester			
CS 5139	Climate Change Adaptation, Mitigation and Carbon Trading	1	Compulsory
CS 5140	Quality Assurance in Plantation Crop Industry	1	Compulsory
CS 5141	Emerging Trends in the Plantation Industry	1	Compulsory
CS5142	Industrial Training	2	Compulsory
CS 5143	Disaster Risk Reduction Through Ecological Approaches	1	Compulsory
AE 6106	Innovative Technologies for Mechanization in Plantation Industry	1	Compulsory
EC 5107	Project Analysis	2	Elective
CS 5144	Integrated Plantation Crops-Other Crops-Animal-Fish Based Farming Systems	1	Elective
CS 5117	Economics of Environmental Forestry	2	Elective
CS 5123	Plant Tissue Culture – Micropropagation	2	Elective
CS 5104	Advanced Horticulture	2	Elective
SS 5104	Plant Nutrition	2	Elective

* Compulsory for non agriculture graduates



Master of Environmental Forestry

Overview

Many developed and developing countries are facing key environmental challenges such as land degradation and deforestation, loss of biodiversity, depletion of coastal resources, water pollution and waste disposal. In this context, development and applica-

tions of forestry and agroforestry related solutions are identified as powerful and proven ways to address burning environmental problems in such countries. Thus, there is a growing demand throughout the world on balancing production and conservation of existing natural vegetations. In this context, professionals with knowledge and skills of agroforestry, plantation forestry and natural forests and their applications in the processes of production, environmental conservation and changing climate are imperative.

The Environmental Forestry programme enables students to obtain postgraduate qualifications in analysis and synthesis of knowledge and skill to apply principles and practices of agroforestry, plantation forestry and natural forests and their management in the context of sustainable development.

There are excellent employment and career opportunities for Environmental Foresters with the above knowledge and skills in government agencies, development agencies, private sector and also as freelance consultants at national, regional and global levels.

Key features

The programme is targeted to provide necessary knowledge and skills on principles and practices of agroforestry, plantation forestry, forest and wildlife ecology, natural forest management, policy and legislations related to

forestry and environment, systematics, biodiversity, genetic conservation and improvement and also on forest influences on climate, soil and water. It also discusses issues on climate change and its impact on forestry, ecotourism, benefit sharing, rural development forestry, urban forestry and arboriculture, GIS, environmental and economic applications in agroforestry and forestry.

The programme consists of classroom and field level lectures, field visits and forest excursions. During the programme students will be able to interact with professional foresters, environmental specialists, developmental specialists, agriculturists and conservation

professionals. Compulsory subjects of the programme will provide a solid foundation required but flexibility exists when selecting subjects according to the requirement of professional careers and interests. Students can also undertake a research project, thesis or pilot study depending on the area of specialization. After completing the programme graduates will have a firm theoretical foundation and practical experience on environmental forestry and will have competencies needed for working as a researcher, forest manager or consultant in universities, government ministries, district forest offices, private sector organizations or international organizations.

No. of Credits: 30

Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants should possess a B.Sc. degree in Agriculture, Plant Science, or related Science acceptable to the Senate of the University of Peradeniya. Those with non-agricultural degrees should have at least 2 years of experience in the field of Agriculture and are required to follow prerequisite courses as prescribed by the Board of Study.

Code	Title	Credits	Option
First Semester			
CS 5110	Forest Ecology	2	Compulsory
CS 5111	Agroforestry	2	Compulsory
CS 5112	Plantation Forestry and Environment	2	Compulsory
CS 5113	Forest Influences on Soil, Water and Climate	2	Compulsory
CS 5114	Biodiversity	2	Compulsory
CS 5115	Policy and Legislation Related to Forestry and Environment	1	Compulsory
CS 5117	Economics of Environmental Forestry	2	Compulsory
CS 5116	Forest Systematics	2	Elective
CS 5118	Forest Products and Utilization	1	Elective
AE 5152	Environmental Impact Assessment	2	Elective
SS 5106	Environmental Pollution and Control	2	Elective
Second Semester			
CS 5213	Participatory Forest Management	2	Compulsory
CS 5214	Natural Forest Management	2	Compulsory
CS 5215	Ecological Interaction of Trees and Crops	2	Compulsory
CS 5216	Urban Forestry and Arboriculture	2	Compulsory
CS 5298	Directed Study	5	Compulsory

Note: Course list continued on next page

CS 5203	Climate Change and Crop Production	3	Elective
CS 5211	Tree Crop Physiology	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective
CS 5217	Forest Tree improvement and Genetic Conservation	2	Elective
CS 5218	Quantitative Techniques in Forestry	2	Elective
CS 5219	Advances in Agroforestry	1	Elective
CS 5220	Forest Growth Modelling	2	Elective
AE 5209	GIS for Natural Resources Management	2	Elective
AS 5222	Wildlife Environment	3	Elective
PP 5253	Insect Pests and Diseases of Forests	2	Elective



Forestry Laboratory

M Sc. in Horticulture

Overview

Horticulture is a dynamic and colourful sector of agriculture. It has been a part of a day-to-day life for centuries and is an internationally acclaimed commercial venture today. In many horticultural products,

various links of the production chain operates to distribute them worldwide. In this way, the sequence of breeding, seedling production, crop cultivation, processing, marketing and consumption of fruits, vegetables and flowers is spread around the world. Thus, frontiers of horticulturists are being broadening out from the conventional production and post-harvest aspects to much more skillful managerial, accreditation, marketing and service orientated business needs.

The real benefits of the fruit crops, vegetable crops and ornamental plants are lacking in Sri Lankan gardens, orchards, greenhouses and commercial fields due to improper crop management, inadequate post-harvest technology, low product diversification and defective marketing. The Master of Horticulture offers impressive array of courses and practices of modern technologies to develop man-power in the horticulture sector to improve this situation the horticulture industry in Sri Lanka.

There are excellent employment opportunities in the horticulture industry, such as cultivation or sales consultants, product developers or salespersons. Graduates are also employed as researchers at government research institutions, or as teachers at schools and technical colleges.

Up coming services and industrial sub sectors in the Sri Lankan and global economies would open up more employment opportunities for qualified horticulturists in the future.

No. of Credits: 30

Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants should possess a B.Sc. degree in Agriculture, Plant Sciences or equivalent qualifications acceptable to the Senate of the University of Peradeniya. Students holding non-agricultural degrees required to follow prerequisite courses in consultation with the programme coordinator.

Key features

The Master of Horticulture is designed to produce trained and experienced professionals having an up-to-date knowledge and practical skills in horticulture and natural sciences. The program offers courses on principles and practices of horticultural crop production. The course package of the degree program includes a wide range of courses to provide in depth knowledge on the Horticulture Industry.

The program will provide integrated training in plant breeding, biotechnology, biochemistry, agronomy, diagnostics, pest management and pest-control, with commercial as well as sustainability measures derived from production planning, market intelligence, eco-friendly farming, quality assurance, statistical measures and business planning.

The program consists of classroom lectures, field visits, laboratory and farm practices. During the program students will be able to interact with professionals, researchers and scientists from the Horticulture Industry. Compulsory subjects will provide supplementary knowledge for horticulture. However, there is a flexibility to select subjects according to student requirements. In the second semester students will conduct a research study depending on their requirements and interests.

After completing the program students will be able to develop their own business ventures or be employed as researchers, managers, consultants, or university academics in Horticulture and related fields.



First Semester			
Course No.	Course Title	Credits	Option
CS 5132	Sustainable Garden Management	2	Compulsory
CS 5133	Plant Nutrient Management in Horticultural Crops	2	Compulsory
CS 5108	Fruit Crop Management	2	Compulsory
CS 5109	Olericulture (Vegetable Crop Culture)	2	Compulsory
CS 5129 *	Production Horticulture	3	Compulsory
CS 5107	Protected Culture	2	Elective
CS 5119	Landscape Horticulture	3	Elective
CS 5120	Commercial Nursery Management	2	Elective
CS 5122	Plant Growth Regulators	2	Elective
CS 5123	Plant Tissue Culture	2	Elective
CS 5134	Propagation Techniques for Horticultural Crops	2	Elective
CS 5135	Horticulture in the Temperate Region	2	Elective
CS 5136	Value Addition for Horticultural Produce	1	Elective
EC 5104	Agricultural Marketing I	2	Elective
AB 5108	Principles of Plant Breeding	2	Elective
AE 5118	Principles of Post-harvest Biology and Technology	2	Elective
Second Semester			
CS 5232	Physiological Basis of Horticultural Crop Production	2	Compulsory
CS 5233	Bioactive compounds in Fruits and Vegetables	1	Compulsory
CS 5298	Directed Study	5	Compulsory
PP 5259	Insect Pest Management in Horticultural Crops	2	Compulsory
CS 5206	Post-harvest Physiology and Management of Horticultural Crops	2	Compulsory
CS 5222	Commercial Floriculture	3	Compulsory
CS 5235	Entrepreneurship Developments in Horticulture	1	Elective
CS 5236	Biotechnology in Horticultural Crops	2	Elective
CS 5202	Weed Control	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective
CS 5216	Urban Forestry and Arboriculture	2	Elective
CS 5223	Indoor Gardening for Interior Decorations	2	Elective
CS 5226	Advanced Greenhouse Production and Technology	2	Elective
ST 5155	Design and Analysis of Experiments	2	Elective
SS 6201	Techniques for Efficient Plant Nutrient Management	2	Elective
PP 5254	Disease Management in Floricultural Crops	2	Elective
AB 5217	Breeding Strategies of Economic Crops	2	Elective

* Compulsory for non agriculture graduates

Master of Tropical Agriculture

Overview

Tropical countries are the centre of origin and domestication of most important food crops of the world. Furthermore, climatic, soil and topographic variations within the tropics are high, resulting in a large number of agro-ecological

regions. As a consequence the tropics are rich in biodiversity of flora and fauna. In terms of agro-biodiversity the tropical agricultural ecosystems are no exceptions. Therefore, sustainable management of agricultural systems with the aid of modern science will help to alleviate hunger and poverty in developing countries in the tropical zone.

In this context, the Master of Science in Tropical Agriculture programme is designed to provide a multidisciplinary approach to expand the overall background in the basic and applied management of natural resources for agricultural development in tropical environments.

The programme is structured to train students for challenging jobs in research and developmental organizations, government departments and institutes, and international organizations involved in food production and supply in tropical countries.

Key features

The Master of Tropical Agriculture is a two year full time programme, which explores the potential to achieve goals of stakeholders in the agriculture sector in tropical regions by providing production-oriented training. The candidates would complete a well designed programme on tropical agricultural systems, with a major focus on the key crops, livestock and environmental issues.

No. of Credits: 60

Minimum Programme Duration: 4 semesters

Entry Requirements: Applicants with B.Sc. Degree in Plant Sciences or related science acceptable to the Board of Study Crop Science and non agricultural graduates with at least 2 years of experience in the field of Agriculture acceptable to the Senate of the University of Peradeniya.

The first two semesters of the programme consists of lectures, field and farm visits. Students will also be exposed to Agriculture in dry areas by providing field practical training. During this period students will have opportunity to work with farm families in the dry environments, work with government officers directly involved in agricultural development in these regions and have hands-on experience where they can

put theory into practice. Students are expected to undertake a research project based on their area of specialization during the second year.

The curriculum is designed to prepare graduate students, especially, non agricultural or foreign graduates to become open minded, well-trained professionals in sustainable agricultural land use of integrated tropical agro-ecosystems.

Code	Title	Credits
First Semester		
CS 5128	Integrated Crop-Livestock Farming Systems in the Tropics	Prerequisite
PP 5156	Integrated Pest Management in the Tropics	Prerequisite
CS 5124	Field Crops in the Tropics	2
CS 5125	Tropical Cropping Ecosystems	2
CS 5126	Tropical Environments and Farming Systems	2
CS 5127	Tropical Plant Diversity and Ethno-Botany	2
AS 5154	Tropical Animal Production I	3
AE 5166	Water Resources Management for Tropical Agriculture	3
SS 5155	Management of Tropical Soils	3
EC 5105	History of Agricultural Policies in Sri Lanka	2
ST 5155	Design and Analysis of Experiments	2
Second Semester		
CS 5229	Plantation Agriculture in the Tropics	2
CS 5230	Tropical Horticulture	2
AS 5214	Livestock Health and Hygiene	2
AS 5254	Tropical Animal Production II	3
EX 5110	Development Extension and Education	2
Second Year		
	Research Project	30



Sri Lanka has been identified as one of the 34 global biodiversity “hotspots” by the Conservation International. Sri Lanka’s lowland rainforests, *montane* rainforests and south-western rivers and streams are listed in the WWF Global 200 eco-regions as one of the most biologically distinct terrestrial, freshwater, and marine eco-regions of the planet

