BEE GREEN
FOR A GREENER PLANET

GROW SMARTER.
WORK SMARTER.
EARN GLOBALLY.

Certificate in Hi-Tech Greenhouse Management
NVQ Level 5 Course
(Online)

BECOME A GLOBAL EXPERT IN MODERN AGRICULTURE

Are you a school leaver or job seeker in agriculture/horticulture?
Looking for high-income foreign employment opportunities?

This is your chance to upskill with the most in-demand agricultural technologies the world needs today.

WHY THIS COURSE?

Agriculture is evolving with AI, automation, and sustainability at its core. Countries around the world are embracing smart greenhouses to secure their food future — and they need skilled professionals who understand these technologies.

We're not just giving you a certificate —
We're opening doors to global careers, building revenue for Sri Lanka, and empowering you to lead in the future of farming.

MINIMUM QUALIFICATIONS

- Five passes in G.C.E O/L (Including Science and English)
  or
- Two passes in G.C.E A/L

* Can be exempted for those who have a minimum of one year experience in protected culture

NATURE OF THE PROGRAM

Conducted by	Agriculture Education Unit of the Faculty of Agriculture, University of Peradeniya		
In Partnership with	Bee Green Exports (Pvt) Ltd. No.189/7, Sama Mawatha, Nawala Road, Nugegoda, Sri Lanka. Phone: +94 115 939 100 | Fax: +94 112 585 950		
Course duration	12 months	NVQ level	5
Credit limit	30 (20 Theory and 10 practical)		
Time allocation	Part-time (During weekends)		
Mode of operation	Theory: 90 % online; Practical: 90 % on-ground		
Course fee	Rs. 255,000/= per Student		
Expected inauguration	05th August, 2025		

PROFESSOR PANEL

Prof. W.A.P. Weerakkody
Crop Science
University of Peradeniya

Prof. K.S. Hemachandra
Agri. Biology
University of Peradeniya

Prof. K.S.P Amaratunga
Agri. Engineering
University of Peradeniya

PROSPECTIVE OUTCOME

Developing a well-trained group of agriculturist, specialized in Advance Protected Culture or Greenhouse Management who would have the knowledge, the right skills and the attitude to manage and control a fully automated greenhouse using AI technology from seed to harvest. They can meet the requirements needed for an Assistant Greenhouse Manager, Greenhouse Technician or a Junior Agronomist in counties around the world adhering to environment regulations and social norms.

COURSE OUTLINE

(a)	***Prerequisites****	
Code	**Couse title**	**Course credits (Theory/Practical/ILS)**
AEU-PC p1	English for beginners	1 (10/10/20)
AEU-PC p2	Introduction to IT and learning tools	1 (10/10/30)
AEU-PC p3	Introductory Physics	1 (10/10/10)
(b)	***Term/ Semester 1 (15 weeks)***	
Code	**Couse title**	**Course credits (Theory/Practical/ILS)**
AEU-PC 11	Basics in plant and environmental sciences	1 (10/10/20)
AEU-PC 12	Introduction to agriculture	1 (10/10/05)
AEU-PC 13	Basics in horticultural crop production	1 (10/10/10)
AEU-PC 14	Introduction for entomology and plant pathology	2 (25/10/10)
AEU-PC 15	Basics in soil science and plant nutrition	1 (15/0/20)
AEU-PC 16	Introduction to protected culture	1 (10/10/05)
AEU-PC 17	Greenhouse designs and micro-climate control	1 (10/10/05)
AEU-PC 18	Soilless culture and micro irrigation	2 (20/20/10)
AEU-PC 19	Mechanization and automation in greenhouse environment control	2 (20/20/10)
(c)	***Term/ Semester 1 (15 weeks)***	
Code	**Couse title**	**Course credits (Theory/Practical/ILS)**
AEU-PC 21	Greenhouse crop management	3 (15/60/00)
AEU-PC 22	Plant nutrition in Hydroponics	2 (20/20/10)
AEU-PC 23	Greenhouse crop protection	2 (20/20/20)
AEU-PC 24	Postharvest quality and value chain management in horticultural produce	2 (20/20/10)
AEU-PC 25	Budgeting and agribusiness management in protected culture	2 (20/20/20)
AEU-PC 26	Industrial training in protected culture	4 (10/100/00) – 1-2 months (Full/Part time basis)

NOTE:

* 15 hrs of classroom/online lectures (theory) = 1 Credit
* 30 hrs of labroratory or field practical/visit = 1 Credit
* 30 hrs of industrial training = 1 credit

COURSE CONTENTS

Code	Couse title and contents
AEU-PC p1	**English for beginners**: Basic sentence patterns (singular/plural forms, active and passive voice); Vocabulary for day-today English; Technical terms in agriculture, plant science, & food science, marketing, soil science, plant protection, etc.; Comprehension and communication skills; Patterns of talk and writing (with emphasis on contributing to live discussions and formulating written comments).
AEU-PC p2	**Introduction to IT and learning tools**: Basics in computer science and internet-based learning/communicating tools; Email and google communication systems; Individual and group exercises in online mode; Awareness development on user-friendly computer packages for technical purposes; technical Use of MS-Office package; Versatility in the use of social media platforms, within the ethical boundaries.
AEU-PC p3	**Introductory physics and chemistry**: Refreshing the GCE (OL) knowledge and skills in physics and chemistry, required to understand the theoretical basis and to handle tools and equipment in greenhouse climate control, hydroponics systems, plant nutrition and mechanization/automation.
AEU-PC 11	**Basics in plant and environmental sciences**: Refreshing the GCE (OL) knowledge and skills in biology with emphasis on plant and cell biology, environmental science, plant physiology, plant growth indices, population dynamics, natural competition, genetic erosion & need for conservation; Concept of ecology and sustainability.
AEU-PC 12	**Introduction to agriculture**: Status of global agriculture and the Sri Lankan share in it, Historical evolution of agriculture and current global trends; Diversity of crops and farm animals; Basics in agronomy and horticulture; Constraints of agri-food systems and its future prospects.
AEU-PC 13	**Basics in horticultural crop production**: Definitions and basic facts in global horticulture; Specific facts about garden crops; Horticultural crop groups and leading crops and varieties; Main cropping systems practiced in commercial and subsistence scales of horticulture, with emphasis on commodity crop groups.
AEU-PC 14	**Introduction to entomology and plant pathology**: Introduction to biological and physiological stress on plants; Diversity and severity of causal organisms and factors affecting biotic and abiotic stress; Practical approaches in biotic stress management.
AEU-PC 15	**Basics in soil science and plant nutrition**: Introduction to soil and plant nutrition; Key parameters of a typical arable soil; Factors affecting soil degradation; Status of soil degradation globally with emphasis on Sri Lanka; Practical approaches in assessing physical, chemical and biological properties
AEU-PC 16	**Introduction to protected culture**: Definitions and basic concepts; Need for growing crops under protection and environment control in different global regions; Extent of greenhouse crop production by main producer countries and regions; Countries and institutions leading in the protected culture; Future of protected culture; Occupational safety in protected culture.
AEU-PC 17	**Greenhouse designs and microclimate control**: Variability of greenhouse designs with respect to size, shape, cladding, and ventilation options; Need for microclimate control and options available for modifications and employing extra devices for temperature, light/shade humidity and CO_2 control.
AEU-PC 18	**Soilless culture and micro irrigation:** Specificity and diversity of soilless culture systems (hydroponics); Grow media and micro irrigation; Specific facts in selection and management of each of them; Visits or audio visual based study of main soiless culture

AEU-PC 19	Mechanization and automation in greenhouse environment control: Need for mechanization and automation, based on the intensity of environment control and the quality standards of the target markets; Evolution of mechanization and automation over the last few decades (from dedicated micro processers to smart technology/ use of AI tools); Basic and high grade mechanical options in largescale commercial systems; Present status of automation and robotics in protected culture.
AEU-PC 21	Greenhouse crop management: Basis of crop and variety selection; Principles and practices of nursery and crop management in protected culture with emphasis of fruit-vegetables (tomato, bell pepper & green cucumber), small fruits (Straw berries), leafy vegetables (i.e. Lettuce), micro greens, cut flowers (Roses, Crysanthemum & Gerbera) and foliage ornamentals; Favourable range of micro climatic and substrate conditions for popular horticultural crop species; Possible physiological disorders and protocols available for minimizing them.
AEU-PC 22	Plant nutrition in Hydroponics: Specific facts of grow media and plant nutrient management in main types of hydroponics (Ex: tomatoes, strawberries, bell pepper, cucumber, egg plant, microgreens, herbs & Lettuce) and micro irrigation systems, including circulation and recirculation types; Importance of EC and pH and their control methods; Optional fertilizer types for hydroponics (chemical/ organic and solid/ liquid); Waste management in hydroponics.
AEU-PC 23	Greenhouse crop protection: Specific facts on type and severity of pest and disease incidence in greenhouse crop; Effect of pest and diseases on the yield and quality; Options available for integrated pest and disease management in greenhouses (IPM)
AEU-PC 24	Postharvest quality and value chain management in horticultural produce: Postharvest losses in horticulture; Up-market access through food safety, branding and value addition; Loss reduction technology; Diversity of value chains; Quality assurance in horticultural produce.
AEU-PC 25	Budgeting and agribusiness management in protected culture: Protocols followed and exercises in quantity surveying (QS) in greenhouse structures and construction; Estimation of crop budgets (costing and income projection); Credit and subsidy schemes available for protected culture; Environmental cost in agriculture and its impact on sustainability
AEU-PC 26	Industrial training in protected culture: Hands-on experience on all crop management practices of greenhouse crops; Growing systems pertaining to major hydroponics systems, under tropical weather conditions, preferably for a period of 3 months (full time)

COURSE PAYMENT PLAN OPTIONS

Thank you for your interest in our professional development program in Hi-Tech Greenhouse Management. We are pleased to offer flexible payment options to make it easier for you to join and benefit from this career-advancing opportunity.

Total Course Fee: LKR 255,000

Payment Plan Options

Option 1: Installment Plan

This plan is designed for students who prefer to pay the course fee in multiple installments. It allows you to begin your learning journey with a manageable initial payment.

• Initial Upfront Payment: LKR 100,000

• Followed by Three Monthly Installments of: LKR 51,666.66

Option 2: Full Payment with Discount

Students who choose to pay the full course fee upfront will receive a 10% discount as a token of appreciation for their commitment.

• Discounted Total Payment: LKR 229,500 (after 10% discount)

• Must be paid in full before the course start date

What the Package Includes

Enrolling in this program provides not just theoretical knowledge, but also practical experience and essential certifications to enhance your career.

• Certificate for Hi-Tech Greenhouse Management – Industry-recognized and professionally accredited

• IELTS Training – To support your global career opportunities and migration aspirations

• Internship – Gain hands-on experience at reputed greenhouse companies located in Sri Lanka to apply your skills in real-world settings

• Foreign Employement – We will find foreign employers who are ready to hire you.

We are committed to supporting your educational and career goals. If you have any questions regarding the payment plans or the program itself, please do not hesitate to contact our admissions team. We look forward to welcoming you to our program.

BEE GREEN™

FOR A GREENER PLANET

BE A PART OF THE FIRST WAVE OF SRI LANKA'S HI-TECH AGRI EXPERTS.

INQUIRE NOW:

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