

WORK-STUDY DIPLOMA IN ARBORICULTURE & HORTICULTURE

MODULE OBJECTIVES

Module 1: Plant Curation & Inventory

On completion of the module, trainees should be able to perform plant curation and inventory, as well as to manage selection of indoors and outdoors plants.

Module 2: Arboriculture Operations & Maintenance

On completion of the module, trainees should be able to manage arboriculture operations and maintenance including tree assessment, pruning, installation, transplanting and removal, as well as managing implementation of tree health management programmes.

Module 3: Plant Health Management

On completion of the module, trainees should be able to diagnose plant health disorders, determine common plant diseases and pests, develop plant health management programme, as well as managing implementation of IPM to treat plant disorder.

Module 4: Soil Science & Amelioration

On completion of the module, trainees should be able to perform soil and media testing and analysis, implement measures to improve soil conditions, as well as preparing growing media on site for planting.

Module 5: Landscape Project Development

On completion of the module, trainees should be able to manage development of landscape projects such as developing environmental management plan for worksite, tree conservation and protection plans, landscape project plan, as well as plant water management plan.

Module 6: Horticulture Operations & Maintenance

On completion of the module, trainees should be able to manage arboriculture operations and maintenance such as managing plant propagation, implementing horticultural maintenance programme and managing maintenance of landscape equipment and machinery.

Module 7: Biophilic Landscaping Management

On completion of the module, trainees should be able to develop plans for sustainable biophilic landscape programme, implement sustainable biophilic landscape programme, and manage maintenance of skyrise greenery and park facilities in accordance with landscape practices and statutory requirements.

Module 8: Landscape Project Management

On completion of the module, trainees should be able to interpret contract documents, manage landscape project, irrigation and drainage systems, as well as implementing tree conservation and protection plans for development works.

Module 9: Company Project

On completion of the module, trainees should have applied their acquired competencies in an authentic project that would value-add to the company.

Module 10: On-the-Job Training

On completion of the module, trainees should be able to apply the skills and knowledge acquired at ITE College and workplace to take on the full job scope, including supervisory function where appropriate, at the company.

OJT LIST OF COMPETENCIES

Course Title: Arboriculture & Horticulture

Level: Work-Study Diploma

S/N	List of Competencies (Standard)
A: Manage growing media properties and amelioration	
28.	Perform soil and media testing and analysis
29.	Implement measures to improve soil conditions
30.	Prepare growing media on site for planting
B: Manage plant health programme	
31.	Perform plant health diagnosis
32.	Develop plant health management programme
33.	Manage implementation of IPM to treat plant disorder
C: Manage plant curation and inventory	
34.	Perform plant curation
35.	Perform plant inventory
36.	Manage selection of indoors and outdoors plants
D: Manage arboriculture operations & maintenance	
37.	Perform tree assessment
38.	Manage tree pruning
39.	Manage tree planting, transplanting and removal
40.	Manage Implementation of tree health management programme
E: Manage horticulture operations & maintenance	
41.	Manage maintenance of landscape equipment and machinery
42.	Implement horticultural maintenance programme
43.	Manage plant propagation
F: Manage biophilic landscaping programme	
44.	Develop plan for sustainable biophilic landscape programme
45.	Implement sustainable biophilic landscape programme
46.	Manage construction and maintenance of green wall and green roof
47.	Manage construction and maintenance of Park Facilities
G: Manage development of landscape projects	
48.	Develop environmental management plan for worksite
49.	Develop tree conservation and protection plans for development works
50.	Develop landscape project plan
51.	Develop irrigation and drainage plans (including water saving & water demand for irrigation system)
H: Manage implementation of landscape projects	
52.	Manage landscape project
53.	Manage irrigation and drainage systems
54.	Implement tree conservation and protection plans for development works
55.	Construct garden hardscapes