HIGHER NITEC IN LANDSCAPE MANAGEMENT & DESIGN (3 YEARS)

CERTIFICATION

Credits required for certification:

Sector Foundation Modules	:	18
Specialisation Modules	:	39
Internship Programme	:	12
Life Skills Modules	:	10
Cross-Disciplinary Core Modules	:	9
Electives	:	8
Total	:	96

COURSE STRUCTURE

Module Title	Credits
SECTOR FOUNDATION MODULES	
Workplace Safety, Health & Environment	3
Data & Digital Essentials	3
Electrical Fundamentals	3
Sustainable Engineering	3
Green Building Technology	3
IoT for Engineering	3
SPECIALISATION MODULES	
Nursery Operations	3
Landscape Operations	3
Plant Curation & Health	3
Landscape Design	3
Arboriculture Operations	3
Landscape Technical Drawings	3
Landscape Project Planning	3
Arboriculture Management	3
Landscape Event Management	3
Skyrise Greenery	3
Turf Operations	3
Wildlife Conservation & Management	3
Urban Farming	3
INTERNSHIP PROGRAMME	
Internship Programme 1	4
Internship Programme 2	8
ELECTIVES (GENERAL) AND LIFE SKILLS MODULES	

Module Title	Credits
For details, click <u>here</u>	

Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.

MODULE OBJECTIVES

Sector Foundation Modules

Workplace Safety, Health & Environment
On completion of the module, students should be able to apply Workplace Safety and Health (WSH) policies, Environmental Management System procedures and practices in the planning, preparation and execution of work activities to ensure a safe and reliable workplace environment.

Data & Digital Essentials
On completion of the module, students should be able to prepare data for analysis, use online tools for collaborative work and maintain information security when online.

Electrical Fundamentals
On completion of the module, students should be able to interpret circuit schematic and board layout, perform DC circuit connection and in-circuit measurement.

Sustainable Engineering
On completion of the module, students should be able to determine key contributors to environmental changes and the challenges involved in implementing sustainable initiatives, and propose effective strategies to promote sustainability and address environmental challenges across various industries.

Green Building Technology
On completion of the module, students should be able to interpret and determine green building features and performance; and to develop best practices for sustainable buildings in accordance with BCA Green Mark Framework.

IoT for Engineering
On completion of the module, students should be able to set up an IoT, configure the controller to transmit sensor's collected data wirelessly to an IoT platform.

Specialisation Modules

Nursery Operations
On completion of the module, students should be able to supervise nursery operations and maintenance, utilise various growing media for plant propagation, install plant displays, and perform inventory control for nursery plants.

Landscape Operations
On completion of the module, students should be able to oversee the maintenance of landscape operations and park facilities, manage irrigation and drainage systems, and supervise the implementation of landscape maintenance in accordance with contractual requirements and sustainable horticulture practices.

Plant Curation & Health
On completion of the module, students should be able to curate plants, identify and address plant health disorders, and apply Integrated Pest Management (IPM) to manage infestations and plant disorders.

Landscape Design

On completion of the module, students should be able to conduct landscape site analysis, prepare landscape site layouts, engage in spatial design and planning, and articulate and present landscape conceptual designs while adhering to the fundamental principles of landscape design.

Arboriculture Operations

On completion of the module, students should be able to perform tree inspections for evaluating both the structural safety and health of trees, as well as proficiency in tree selection and skilled in manual tree access.

Landscape Technical Drawings

On completion of the module, students should be able to develop landscape site plan, interpret construction drawings and prepare Computer-Aided Drawings (CAD) for landscaping, and demonstrate proficiency in updating as-built landscape drawings.

Landscape Project Planning

On completion of the module, students should be able to develop project planning skills, manage project schedules in adherence to administrative requirements, implement measures to promote environmental sustainability, and manage stakeholders to ensure the successful implementation of projects.

Arboriculture Management

On completion of the module, students should be able to assist in monitoring arboriculture operations related to tree pruning, removal, planting and transplanting, as well as supervising the maintenance of arboriculture equipment.

Landscape Event Management

On completion of the module, students should be able to manage the implementation of workflow for landscape events, which includes activities such as procurement, logistics, outreach coordination, and reinstatement of landscape event sites.

Skyrise Greenery

On completion of the module, students should be able to design, implement, and oversee the maintenance of skyrise greenery, involving the integration of appropriate components and plants species tailored to the project's requirements.

Turf Operations

On completion of the module, students should be able to manage turf maintenance for golf courses and sports turf. This includes integrating appropriate turf nutrition plans and implementing pest management program to address pests, diseases and disorders, conducting soil analysis, and overseeing installation and maintenance of turf and irrigation system.

Wildlife Conservation & Management

On completion of the module, students should be able to manage local native wildlife species, restore native habitats, supervise maintenance of water bodies, and resolve encounters between human and wildlife.

Urban Farming

On completion of the module, students should be able to install and manage soil and water-based farming systems, both outdoor and indoor. This includes activities such as crop selection, harvesting, yield management, and supervision of mushroom cultivation

Electives (General) and Life Skills Modules

For details, click here.