DIPLOMA IN LANDSCAPE TECHNOLOGY

Dip (Landscape Technology) - NQF Level 6 (360 credits)

Qualification code: DPLT20

SAQA ID: 100984, CHE NUMBER: H16/14301/HEQSF

Campus where offered: Pretoria Campus

REMARKS

a. *Admission requirement(s) and selection criteria:*

- **APPLICANTS WITH A SENIOR CERTIFICATE OBTAINED BEFORE 2008:**

  Admission requirement(s):
  A Senior Certificate or an equivalent qualification, with an E symbol at Higher Grade or a D symbol at Standard Grade for English, Mathematics, and Physical Science or Biology.

  Recommended subject(s):
  Agricultural Sciences.

  Selection criteria:
  To be considered for this qualification, applicants must have an Admission Point Score (APS) of at least **24.**

- **APPLICANTS WITH A NATIONAL SENIOR CERTIFICATE OBTAINED IN OR AFTER 2008:**

  Admission requirement(s):
  A National Senior Certificate with a bachelor's degree or a diploma endorsement, or an equivalent qualification, with an achievement level of at least 4 for English (home language or first additional language), 3 for Mathematics or Technical Mathematics or 4 for Mathematical Literacy, and 3 for Life Sciences or 3 for Physical Sciences or Technical Sciences.

  Recommended subject(s):
  None.

  Selection criteria:
  To be considered for this qualification, applicants must have an Admission Point Score (APS) of at least **25** (with Mathematics or Technical Mathematics) or **26** (with Mathematical Literacy).

b. *Assessment procedure(s):*
Applicants with the minimum APS will be considered for admission until the programme complement is full.

Acceptance is subject to available capacity according to the Student Enrolment Plan (SEP). Once a programme is full, a waiting list will be in place to provide an opportunity for applicants to fill places of those who did not register on time. Applicants will be informed of their status per official letter from the Office of the Registrar, alternatively, they can check their application status on the TUT website, www.tut.ac.za.

c. *Recognition of Prior Learning (RPL), equivalence and status:*
See Chapter 30 of Students' Rules and Regulations.

d. *Intake for the qualification:*
January only.

e. *Presentation:*
Day classes.

f. *Minimum duration:*
Three years.

g. *Exclusion and readmission:*
See Chapter 2 of Students' Rules and Regulations.

h. *WIL in Landscape Technology I:*
See Chapter 5 of Students' Rules and Regulations.

CURRICULUM

FIRST YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
11P105X	Communication for Academic Purposes	(5)	(10)	
BOT105D	Botany I	(5)	(24)	
CLY105D	Construction in Landscape Technology I	(5)	(15)	
CPL105X	Computer Literacy	(5)	(10)	
DLT105D	Design in Landscape Technology I	(5)	(15)	
EMP105D	Environmental Practices I	(5)	(18)	
INI125D	Information Literacy I (block module)	(5)	(2)	
LFI125X	Life Skills I (block module)	(5)	(2)	
MAS105X	Mathematics and Statistics I	(5)	(12)	
SOI105D	Science for Occupational Purposes	(5)	(12)	
TOTAL CREDITS FOR THE FIRST YEAR:			**120**	

SECOND YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
1SU206D	Plant Studies II	(6)	(24)	Botany I
BSP206D	Business Practice I	(6)	(12)	
CLY206D	Construction in Landscape Technology II	(6)	(18)	Construction in Landscape Technology I
DLT206D	Design in Landscape Technology II	(6)	(24)	Design in Landscape Technology I
EMP206D	Environmental Practices II	(6)	(18)	Environmental Practices I
LMT206D	Landscape Maintenance I	(6)	(24)	
TOTAL CREDITS FOR THE SECOND YEAR:			**120**	

THIRD YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
FIRST SEMESTER				
1SU316D	Plant Studies III	(6)	(18)	Plant Studies II
CLY316D	Construction in Landscape Technology III	(6)	(10)	Construction in Landscape Technology II
DLT316D	Design in Landscape Technology III	(6)	(20)	Design in Landscape Technology II

LDM316D	Landscape Management II	(6)	(12)	Business Practice I

TOTAL CREDITS FOR THE SEMESTER: 60

SECOND SEMESTER
After completion of all modules.
Students register for one of the following Work-Integrated Learning options. WLI316D is subject to Industry memorandum of understanding (MOA). Placement for WIL is subjected to a departmental evaluation and approval.

WLI316D	WIL in Landscape Technology I	(6)	(60)
WLT316D	WIL in Landscape Technology I	(6)	(60)

TOTAL CREDITS FOR THE SEMESTER: 60

TOTAL CREDITS FOR THE THIRD YEAR: **120**

TOTAL CREDITS FOR THE QUALIFICATION: **360**

MODULE INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular module. At time of publication, the syllabus content was defined as follows:

B

BOTANY I (BOT105D) **1 X 3-HOUR PAPER**
(Module custodian: Department of Horticulture)
The role of plants in the living world. The plant Kingdom, endemic, indigenous, exotic, history and development. Plant classification. Classification systems. Morphology of higher plants. Seed, roots, stems, leaves, inflorescences, flowers, fruit. Anatomy of higher plants. Plant cells and cellular components, roots, stems and leaves. Plant physiology. Photosynthesis, respiration. Transpiration and water movement in the plant. Transpiration and water movement, mineral uptake and sugar translocation. (Total notional time: 240 hours)

BUSINESS PRACTICE I (BSP206D) **1 X 3-HOUR PAPER**
(Module custodian: Department of Management and Entrepreneurship)
Introduction to the business world, marketing orientation, non-verbal and verbal communication, written business communication, professional ethics, selling techniques, sales administration. (Total notional time: 120 hours)

C

CONSTRUCTION IN LANDSCAPE TECHNOLOGY I (CLY105D) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Horticulture)
The landscape construction process. The various stages that a landscape undergoes to be developed from site survey to plan/design implementation. Introduction to construction materials and terminology. Materials used in landscape construction: bricks, paving, timber, steel, aggregates, etc. Functions and application of various construction materials. The role that various construction materials play in a landscape. Introduction to various tools and machinery used in landscape construction. Familiarisation of hand, power tools and machinery and their uses, as well as their operation. Surveying. Equipment and techniques used in surveying. Grading and site drainage. Site grading and drainage, grading slopes and erosion control. (Total notional time: 150 hours)

CONSTRUCTION IN LANDSCAPE TECHNOLOGY II (CLY206D) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Horticulture)
Interpreting construction documents. Being able to interpret and understand specifications and construction detail from plans / designs and documents. Construction calculations. Measurement and calculation of material requirements / installations in a landscape from a plan. Costing of construction materials. Development of a Bill of Quantities, which details the cost of a landscape installation. Basic construction techniques. Construction techniques and methods for installation of paving, walling, decking, timber work and stairs/ramps in the landscape. Construction drawings, sections and section-elevations. Construction drawings of all features on a landscape site. CAD. Rendering a design and construction. (Total notional time: 150 hours)

CONSTRUCTION IN LANDSCAPE TECHNOLOGY III (CLY316D) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Horticulture)
Irrigation. Materials for irrigation, the design and installation thereof. Site amenities. Working drawings and construction of water features, site furniture, playground equipment, edging, planters and plant protection equipment. Structural design. Design, working drawings and construction of landscape structures. Axonometric, isometric and perspective drawings. 3D rendering of parts of a landscape plan. (Total notional time: 100 hours)

COMMUNICATION FOR ACADEMIC PURPOSES (11P105X) **1 X 3-HOUR PAPER**
(Module custodian: Office of the Executive Dean)
A workable knowledge of English is an essential skill for any graduate who is required to conduct themselves successfully in a professional working environment. This module will equip students with the competencies required to compose a selection of written texts related to communicating both internally and externally within a professional environment. In addition, the module includes strategies that are essential for the effective communication in various situations, including small groups to avoid unproductive conflict, a multicultural context, etc. (Total notional time: 100 hours)

COMPUTER LITERACY (CPL105X) **CONTINUOUS ASSESSMENT**
(Module custodian: End User Computing Unit)
This module provides students with foundational knowledge in computing fundamentals, essential digital skills in key applications based on MS Office Suite and network basics (i.e. MS Outlook and Internet). Online exams are mapped with End-User Computing: SAQA 49077 (61591) Core Element as well as Internet and Computing Core Certification (IC3). (Total notional time: 100 hours)

D

DESIGN IN LANDSCAPE TECHNOLOGY I (DLT105D) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Horticulture)
History of garden design. Prehistory, ancient period, medieval period and modern world. Design methodology layout, processes, procedure and development of an outdoor space. Principles and elements of design. Unit, balance, line, rhythm, scale, texture and form. Plan types design discipline. Variety of plans, measuring, placing of structures and planting design. Design styles and themes. Formal and informal. (Total notional time: 150 hours)

DESIGN IN LANDSCAPE TECHNOLOGY II (DLT206D) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Horticulture)
Landscape design. Site analysis, observing elements, topography, environmental conditions, material use. Design development. Zone diagrams - final master plan. Presentation skills. AutoCAD, MicroSoft PowerPoint, moodboards, professionalism. Styles and themes. Various styles and themes, elements, plant combinations. Planting plans. Drawing techniques. Bill of quantity. Comprehensive costing of plans, planting design and hard landscape materials. (Total notional time: 240 hours)

DESIGN IN LANDSCAPE TECHNOLOGY III (DLT316D) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Horticulture)
To assess a site on the principles of sustainable landscape design practices. To recommend/propose how to overcome urban challenges. To propose various design applications to solve environmental problems. Sustainable landscape design. Sustainable products, design techniques and plant material. Urban design challenges. Challenges and how to overcome with design application. Solving environmental problems through design application. Using plants and other design applications and combinations to solve problems. (Total notional time: 200 hours)

E

ENVIRONMENTAL PRACTICES I (EMP105D) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Horticulture)

The Ecosystem. Cultural-ecological systems. The soil. The functioning of environmental systems. The environment as a resource. The human influence. Environmental pollution. (Total notional time: 180 hours)

ENVIRONMENTAL PRACTICES II (EMP206D) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Horticulture)

Environmental issues and their relevance to South Africa. Urbanisation. Environmental management. Environmental Impact assessment (EIA). Rehabilitation and reclamation. Environmental legislation. (Total notional time: 180 hours)

I

INFORMATION LITERACY I (INI125D) **CONTINUOUS ASSESSMENT**

(Module custodian: Directorate of Library and Information Services)

Introduction of information literacy. Development of a search strategy and application of a search string to search engines and academic databases. Evaluation of information sources. Ethical and legal use of information. (Total notional time: 20 hours)

L

LANDSCAPE MAINTENANCE I (LMT206D) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Horticulture)

Plant nutrition and fertilizing. Plant protection. Turf grass culture. Machines and hand tools. General standards and norms. (Total notional time: 240 hours)

LANDSCAPE MANAGEMENT II (LDM316D) **1 X 3-HOUR PAPER**

(Module custodian: Department of Horticulture)

Human resource management, including labour relations, job descriptions and specifications, human resource planning, personnel motivation, training and development, performance appraisal, remuneration and delegation, communication, labour and relations and supervision and compilation of a basic health and safety file. Contract management, including definitions, types and importance of contracts, formulation of contracts and contract clauses. Tenders and bill of quantities. Definitions and types of tenders, designing and completing tender documents. (Total notional time: 120 hours)

LIFE SKILLS I (LFI125X) **CONTINUOUS ASSESSMENT**

(Module custodian: Directorate of Student Development and Support)

Personal, socio-emotional and academic skills development for students in higher education. This module includes 1. Intra- and interpersonal skills (e.g. emotional intelligence, relationships, and conflict management); 2. General study skills (e.g. time management, goal setting, learning styles); 3. Health and wellness (e.g. HIV/AIDS, GBV issues, substance abuse); 4. Student life and adjustment (e.g. identity development, adjusting to a higher education environment); and 5. Financial management. (Total notional time: 20 hours)

M

MATHEMATICS AND STATISTICS I (MAS105X) **1 X 3-HOUR PAPER**

(Module custodian: Department of Mathematics and Statistics)

Numerical computations, mensuration, equations, functions, descriptive statistics, linear regression and curve fitting. (Total notional time: 120 hours)

P

PLANT STUDIES II (1SU206D) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Horticulture)

Plant classification, definitions and terminology: Annuals and perennials. Geophytes. Groundcovers and climbers. Succulents. Ornamental grasses, reeds and sedges. Herbs and medicinal plants. Shrubs. Trees (fruit and ornamental). Vegetables (exotic and traditional). (Total notional time: 240 hours)

PLANT STUDIES III (1SU316D) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Horticulture)

Functional uses of plants. Visual uses of plants. Plants for specific uses. Plant groupings. Plant biodiversity and habitat development. (Total notional time: 180 hours)

SCIENCE FOR OCCUPATIONAL PURPOSES (SOI115D) **1 X 3-HOUR PAPER**

(Module custodian: Department of Chemistry)

The role and importance of chemistry in everyday life. Classification and properties of matter. Atoms, molecules and ions. General properties of aqueous solutions and reactions in aqueous solutions. Motion. Forces. Energy and power. Density. Pressure. Temperature and heat. Basic Electricity. Basic Magnetism. Waves. (Total notional time: 120 hours)

W

WIL IN LANDSCAPE TECHNOLOGY I (WLI316D, WLT316D) **WORK-INTEGRATED LEARNING**

(Module custodian: Department of Horticulture)

The Work integrated learning in landscape technology involves maintenance practices such as pest and disease identification, staking, pruning, mulching and other related maintenance according to the standard norms as highlighted by South African Landscape Institute (SALI). Design and quantifying of materials for designs will be a priority. Basic construction skills such as paving, building of steps and water features is explored. Planting of trees, shrubs, groundcovers and lawn in a landscape setup is managed. Basic report writing of findings and problem solving skills will be applied. Basic management skills and developing of planning documents in a design setup is part of the work integrated learning programme. WLI316D is subject to Industry memorandum of understanding (MOA). (Total notional time: 600 hours)