



Landscape Horticulturist *A Guide to Course Content*

Landscape Horticulturists are involved in growing, installing, maintaining and selling plants and related materials; landscape; operates greenhouses, nurseries and garden centres; moves trees.

Training Requirements: To graduate from each level of the apprenticeship program, an apprentice must successfully complete the required technical training and compile enough on-the-job experience to total at least 1500 hours each year. Total trade time required is 6000 hours and at least 4 years in the trade.

There are four levels of technical training delivered by Olds College in Olds, Alberta:

- Level One: 8 weeks
- Level Two: 8 weeks
- Level Three: 8 weeks
- Level Four: 8 weeks

The information contained in this pamphlet serves as a guide for employers and apprentices. The pamphlet briefly summarizes the training delivered at each level of apprenticeship training. An apprentice spends approximately 15% of the apprenticeship term in a technical training institute learning the technical and theoretical aspects of the trade. The hours and percentages of technical and practical training may vary according to class needs and progress.

The content of the technical training components is subject to change without notice.



Level One - 8 weeks

Safety

- Occupational Health and Safety
- WHMIS
- fire safety
- safe work practices
- Handling hazardous products

Tools, Machinery and Hydraulics

- commercial vehicles
- machinery maintenance
- engines
- hydraulic systems
- tools

Horticulture Soils

- soil formation
- soil components
- soil physical properties
- soil chemical factors
- water quality
- soil biological properties
- soil sampling and fertility

Plant Identification

- plant taxonomy
- plant use in the landscape

Introductory Botany

- cells and tissues
- stems
- leaves
- roots
- flowers
- fruit
- plant life cycles

Greenhouse Production

- containerisation and media
- greenhouse environment
- propagation
- growing on
- hardening off
- plant health problems
- plant handling
- greenhouse structures
- environmental control systems

Landscape Construction

- basic grading and site preparation
- turf selection and installation
- woody plant selection
- woody plant installation
- pruning fundamentals

Level Two - 8 weeks

Communication and Personal Management

- personal management
- oral communication
- interpersonal communication
- written communication
- professional practice

Irrigation Fundamentals

- introduction to irrigation
- soil-plant-water relationships
- irrigation systems
- pumping systems

Basic Surveying

- site assessment
- surveying

Landscape Construction

- retaining wall construction
- modular and natural stone features
- timber construction
- concrete fundamentals

Plant Identification

- plant taxonomy
- plant use in the landscape

Pest Management

- integrated pest management
- insect identification and management
- diseases identification and management
- plant disorders
- weeds identification and management
- pesticide safety and legislation

Turf Maintenance

- turfgrass fertilization
- sustainable turfgrass practices

Level Three - 8 weeks

Landscape Design

- introduction to landscape design
- design principles and elements
- manual graphics
- design process
- master plan

Plant Identification and Use

- plant taxonomy
- plant use in the landscape

Plant Physiology

- biochemical processes
- transport in the plant
- growth and development in plants
- plant stress

Irrigation

- irrigation system planning
- principals in hydraulics
- design concepts
- design factors
- specifications
- installation
- maintenance and repair
- systems troubleshooting
- sustainable water practices

Arboriculture

- introduction
- tree biology
- pruning
- tree support systems
- tree removal
- working aloft
- tree risk assessment
- tree valuation
- tree inventory
- tree protection
- arboriculture and the law

Landscape Construction

- advanced landscape construction
- water feature construction
- landscape lighting
- sustainable practice in landscape construction

Level Four - 8 weeks

Landscape Design

- construction plans
- contract documentation
- sustainable landscape technologies
- landscape design software

Business Operations

- human resource management
- staff recruitment and retention strategies
- workplace mentoring skills
- advisory network
- basic business administration

Plant Identification

- plant taxonomy
- plant use in the landscape

Nursery and Sod Production

- nursery production
- container production
- grading and shipping nursery stock
- propagation of woody plants
- sod production

Estimating, Tendering and Contracts

- estimating
- guarantees and warranties
- tendering, contracts, bonds
- types of contracts
- scheduling